Notebook, N-07-04-13

had these reversed against Can - did not improve much Capacity - Reversed 3 6 + 10 hours.

443 - 10 hour 670
444 - 6 610
445 - 3 565

40

		Cold	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	
Sticky mix 21000 soaked H_2O green line 20 [illegible] cylinder	350	812	840	841	827	827	807	791	772	775	808	807	806	762	777	712	682		
	351	803	820	825	816	815	797	777	745	738	790	792	793	753	765	711	680		
Co plated	352	806	832	837	825	822	812	790	753	738	788	796	785	757	768	718	682		
[illegible] sticky mix	359	850	850	840	815	812	786	778	732	768	Reversed 818	835	913		728	691	702		
Rings on before pkg	360	900	890	887	877	860	840	827	792	808	845	862	918		778	722	737		
Ni plated	361	923	917	908	895	895	883	873	845	860	883	892	950		806	737	737		
Cutting Irons, rings before pkg very sticky mix	368	898	885	850	807	800	762	748	680	683	Reversed 825	840	880	787	785	thing given given to Holland to test =			
	369	826	835	842	813	815	777	687	721	712	811	820	880	790	793	The unreversed Cuttg Irons 1300 which shows they are OK ?			
Ni pl	370	897	885	877	846	837	817	792	755	743	842	848	908	820	800				
~~Strip~~ glucose mix	377	925	920	917	903	910	900	891	880	870	857	850	8		842	722	787		
	378	915	925	896	882	890	885	880	865	881	875	853			827	795	790		
Ni	379	935	917	907	892	892	885	872	847	853	847	837			815	756	757		
glucose mix sticky	383	883	895	888	882	870	860	845	803	810	792	770			781	687	657		
Rings on before pkg	384	877	896	888	885	870	878	860	812	817	802	790			776	662	570		Split to Holland
Co	385	883	896	900	892	882	880	857	818	830	805	787			775	700	665		
glucose	404	962	981	998	987	978	968	953	905	900	865	837	847		761	Co			
7000 Caffeine	405	900	915	940	915	937	927	922	897	872	822	760	721		575				
Co	406	932	925	940	915	890	856	853	840	858	787	756	710		546				
Cutting Irons Reversed	440	842	845	847	857	841	840	817	815	787	785	762	712	716	630	560	Holland Has		
	441	818	842	850	860	842	856	832	840	807	822	830	780	771	680	622			
Co	442	842	820	855	866	848	860	845	850	825	837	838	795	787	711	662			
Cutting Irons Reversed	443	855	862	875	885	867	880	862	862	792	780	720	782	667		all bad from nearly der[illegible] Irons to be tested by Holland — Co			
	444	880	885	895	900	888	892	872	875	775	770	712	667	650					
Ni	445	880	875	885	892	868 x	865 x	833 x	840 x	722 x	692 x	650 x	600 x	591					

Tried Co To Reverse nickel — see if Comes up —

first [illegible] irons are best & did not improve Ni tubes — now given to Holland to Reverse tube against the Can + see result 445 on split scale.

	700	750
368	—	
369	713	735
370	743	732✓

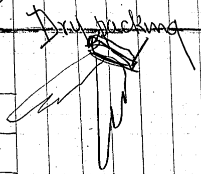
	750
371-	560
372	647
373	682

		Cold	50	100	150	200		250	300	350	400	450	500	550	600	650	700	
Assembled with old irons —	451	807	827	826	808	797	7	795	772	721	743	697	692	697	Co Irons to Hallam to test for Capacity. They are still OK little low but good			
	452	830	861	846	832	850		835	817	785	777	755	745	721				
	453	797	846	843	838	812		792	762	725	772	737	717	656				
Remnants 356	480	892	897	907	842	903		892	885	808	850	845	862	840	798	717	692	
but Ni rings Co	481	897	900	915	910	913		893	906	887	870	865	816	846	775	637	545	Split opp seam
	484½	862	900	900	900	891		890	865	843	902	877	902	865	812	755	762	
Remnants of 371-374	485	872	896	858	882	860		867	870	887	880	862	892	828	787		700	
which had iron rings or	486	832	851	862	850	842		837	792	787	850	840	872	808	787	707	722	
more Ni Display 365. Ni	487	872	893	891	880	844		830	821	833	850	822	840	815	787	672	670	
Remnants 401 Ni	488	855	860	892	871	850		832	823	813	850	832	841	826	796	683	600	
Remnants, 385 Co	494	865	885	897	898	878		870	857	862	882	862	892	861	837	757	697	
"	495	843	785	887	885	871		850	850	850	862	837	867	850	822	736	712	
Remnant, 365	496	950	936	937	908	900		875	881	871	937	906	893	848	807	618	550	
	497	922	891	872	850	827		800	816	792	865	822	820	762	735	560	450	
Co	498	897	892	905	900	857		778	778	750	653×	530×	443×	Co	Co	Co		
Cutting Irons	499	847	850	865	852	822		815	790	815	848	820	837	803	760	682	645	
	500	847	847	841	825	807		785	780	770	776	765	760	733	700	640	575	
Co	501	847	917	915	916	910		900	890	897	917	885	922	865	835	830	780	
Co flakes not run	502	892	892	900	885	860		850	820	830	900	837	855	831	820	750	640	
thru H. Co	503	850	872	868	867	831		825	800	800	850	815	850	803	777	750	602	
ditto	505	877	892	900	865	830		827	807	783	882	850	897	840	820	775	765	
Ni	507	850	867	857	838	817		820	765	767	847	825	867	813	800	772	737	
50 Single lamps	511	912	930	955	952	950		937	932	940	945	907	952	903	857	800	825	
possibly metallic	512	938	950	945	933	910		877	798	771	935	908	923	835	786	700	767	Spcl

		Cold	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	
250 milg KCP	564	850	878	870	880	877	883	860	852	865	835	846	807	777	758	792				
	565	867	900	890	900	897	898	865	860	862	817	812	807	760	750	800				
ni	566	883	900	890	897	887	886	842	830	800	737	750	741	710	650	715 split.				
100 Single Tamps	646	807	855	866	850	845	850	87	810	850	827	875	817	835		787				Co
	647	795	845	866	860	837	847	825	787	872	827	865	820	810		767				
Ni	648	793	830	830	836	820	835	817	807	843	812	850	800	817		770				
100 ~~Double~~ Tamps	649	850	877	891	891	895	891	~~865~~	[illegible]	[illegible]	[illegible]	[illegible]	~~760~~	788		660				Co to Holland to 2 grm [illegible]
	650	800	837	835	836	813	813	~~790~~	[illegible]	[illegible]	[illegible]	[illegible]	~~700~~	715		597				
Co	651	863	825	879	872	857	882	850	812	850	817	802	740	750		670				
ditto	652	890	917	932	925	912	922	912	892	932	900	937	891	892	805	802				
	653	908	936	950	955	950	950	947	925	932	917	946	900	915	837	807				
ni	654	927	950	940	950	941	945	955	937	957	925	945	882	820x	758	745				
75 Double T	658	920	967	962	987	975	967	957	910	955	935x	960x	878	880x	777	725				Co to Holland for 2 OH.
	659	910	941	955	948	942	932	890	835	950	905x	917x	845	850x	750	750				
ni	660	953	975	996	995	978	967	940	906	982	937	952x	890	866x	750	727				
flake thru 50 m	673	895	882	885	885	806	812	775	735	842	787	787	730x							Co
	674	922	911	930	916	900	885	870	831	900	887	885	807							
Co	675	612	920	935	916	877	853	860	845	912	867	840	712							
Run Cold	752	900	985	993	953	1000	1002	987	1005	962	967	930	955	927	930					
	753	802	880	887	861	880	885	882	890	858	862	847	865	847	875					
Co	754	815	925	938	912	917	941	937	950	910	922	877	900	877	867					
Run Cold	755	880	917	913	900	922	920	900	922	853	870	833	850	822	825					
	756	877	967	980	972	987	980	972	987	938	945	920	935	930	935					
ni	757	917	997	1010	990	972	996	987	1015	953	973	941	956	937	937					

		Cold	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
Run cold	758	831	950	967	927	960	962	943	965	960	930	877	895	872	857			
	759	832	918	940	903	930	945	915	937	937	900	847	862	822	800			
Co	760	895	992	1000	967	997	1012	977	1037	1000	957	917	933	910	950			
Run Cold	761	960	1030	1045	1040	1055	1055	1032	1055	1050	1012	987	997	957	867			
	762	877	950	972	965	982	997	982	1010	1013	970	950	967	937	962			
Ni	763	945	1025	1032	1017	1030	1033	1020	1048	1032	1007	992	1010	981	972			
Reg green mixed long time [illegible]	906	892	945	922	925	875	841	817	840		675							
very sticky – tacky	907	840	895	900	875	845	850	842	850		757	Co						
Ni	908	875	915	910	875	825	820	793	835		700							
Dry pkg 100 sccm	1183	850	885	883	887	887	927	890										
16 flake 37 g	1184	848	860	867	856	867	902	867										
	1185	823	900	895	907	895	936	907										
5 Co flecks 12 g thru 40 300 sccm dry pk	1301	902	955	962	948	957	971	941	Co									
Ni	1302	882	880	866	850	830	767*	600*										
150 sccm large flake graphite –	1297	621	597	582	570	555	626	625	595	570								
	1298	627	592	595	575	555	625	632	600	580								
Pregun Zycat 2401 Required plunger 10 Co 24 g thru 20 fed simultaneously	1470	1055	1066	1058	1070	1042	987	810	815	Co								
1 Style	1471	1057	1067	1045	1070	1050	996	847	795									
	1472	1055	1070	1056	1060	1032	977	815	787									
24.00, 003 Zy Cat	1500	1003	1055	1043	1055	1065	1085	868	Co									
10 Co 24 g 2 Loading before filling	1501	1055	1083	1057	1070	1078	1070	847										
Style 1 4148	1502	1075	1075	1092	1087	1066	1068	867										
Dip 1500	1503	1087	1116	1095	1082	1075	1043	846	Co									
Style 2	1504	1110	1125	1095	1077	1070	992	895										
	1505	1092	1100	1045	1045	1017	890*	841										

Dry packing



		Cold	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
Dup1506 Style 2	1509	1046	1100	1095	1100	1097	948		762 sx									
	1510	1062	1112	1097	1092	1100	1100		977	Co								
4.419	1511	1050	1086	1075	1070	1077	1085		987									
2400 003 [illegible] ground 10 Co 24 g style 2	1515	1068	1092	1067	1065	1062	948		762 sx									
	1516	1067	1090	1077	1072	1070	1035		827 sx	Co								
	1517	1046	1066	1055	1050	1065	1010		855 sx									
10Co24 - 24000. [illegible] Chg [illegible] 10	1512	1113	1108	1087	1072	1076	1035											
4.470	1513	1160	1107	1080	1067	1055	955	Co										
	1514	1120	1127	1082	1040	967	862											
2400 003 10 Co f 21 mils green 3 mils/ KCP [illegible] style 1	1530	956	993	1015	1017	1011	972	853	832 sx	752	747							
	1531	912	963	982	995	1050	950	860	832	690	825	Co						
	1532	827	862	910	912	917	871	690.	695	635	805							
2400 003 10 Ni 1/2 ▨ thick 24 g style 1 Not H.	1559	867	842	855	862	911	887	887	880	892								
	1560	867	830	855	860	905	910	905	880	912								
	1561	892	862	872	882	912	895	875	822	827								
2400 003 10 Ni 1/2 ▨ thick Thru H - 24 g style 1	1575	922	907	952	950	975	976	955	940	912	932							
	1576	892	890	922	927	942	950	933	922	900	917							
	1577	907	890	932	942	962	970	931	907	877	872							
2400 003 Spiral tube 10Co 24 g Style 2 Reg plunger	1601	877	977	1017	1035	1027	1027	946	Co									
	1602	915	977	1010	1020	1017	1017	968										
Dup1554 - except 10Co 24 g pled with new plunger 4 sections style 2 plunger straight.	1609	957	981	1020	1037	1047	970	1065										
	1610	892	957	980	1010	1012	1037	943	Co									
	1611	812	947	985	1011	1030	[illegible]	962										
2400 003 10Co 24 g thru 80 square feed 237 plunger style 1	1624	972	1015	1005	1021	972	935											
	1625	976	1018	1020	1025	1025	986		Co									
	1626	987	1025	1010	1031	1000	960											

4 hours chg [illegible] new 6½ & 5½ [illegible] 27% [illegible]

			Cold	50	100	150	200	250	300	350	400	450	600	550	600	650	700	750	800
Ni f Hiro H – green 1 wash before filter · New Agr side feeder 24 g 10 nif 0001 6.00	▨	1740	962	1053	1045	1056	1000	1050	997	1000 S									
240a-003 3 lbs – [illegible]		1741	955	1061	1061	1068	1032	1087	1052	1040									
ditto 3½ lbs	▨	1742	1017	1085	1090	1093	1042	1077	1005 -S	975 BS									
6.04		1743	962	1036	1062	1037	1035	1106	1062	Bent S 1070									
ditto 4 lbs	▨	1744	998	1082	1080	1112	1087	1135	1100 BS	B split 1087									
6.351		1745	957	1037	1042	1066	1027	1072	1030 S bent	1007									
Ditto 4½	▨	1746	908	987	1005	1037	1000	1050	1023 S bent	1000									
6.56		1747	912	985	990	997	975	1012	973 bent	942									
Ditto 5 lbs	▨	1748	880	962	950	957	962	987	975 BS	972									
6.53		1749	902	967	972	992	975	1006	987	972									
240a-004 [illegible] Co 10 24 g side feed [illegible] 10		1762	1045	1153	1222	1202	570	swollen terrible CO [illegible]											
		1763	1130	1245	1265	1277	875 *												
3½ lbs 1 wash before filtered [illegible] 21% [illegible]		1764	1023	1167	1197	1220	962												
Do 4 lbs		1765	1072	1242	1250	1280	1012 x	quite so [illegible] 1764 but [illegible] CO											
		1766	1050	1266	1282	1275 *	655 x												
		1767	1082	1205	1210	1202	925 x												
Do 4½ lbs		1768	1087	1187	1200	1205 *	851 x	[illegible] split [illegible] Co											
		1769	1083	1223	1237	1247	1207 x												
		1770	1023	1147	1127	1162	1050 x												
Do 5 lbs		1771	987	1132	1166	1180	1162 x	Horribly split [illegible] Co											
		1772	905	1030	1056	1100	962												
		1773	938	1127	1137	1152 *	1140 *												
Ditto Ni flake 3 lbs	▨	1774	970	1040	1050	1086	1087	1082 *	1072	1035	1047								
004 [illegible] 5.95		1775	1017	1150	1147	1175	1177	1165	1160 SYSW x	1122	1130								
Ni flour		1776	987	1075	1068	1067	1091	1065	1050 SYSW x	1020 S	1040								

* split + swell

$3\overline{)3280}$
1093

Burst open

Slightly split

SS Swelled & split
BS Badly "
~~S split~~
BSB badly split & bent

			Cold	50	100	150	200	250	300		350	400	450	500	550	600	650	700	750	800
do Ni flake	▨	1777	955	1022	1017	1082 x	1068 x	1037 x	1032		985 BS	995								
3 1/2 lbs		1778	961	1050	1042	1057	1058	1050	1011	x	970 S	987								
6.17		1779	943	1040	1046	1077	1087	1068	1057		1030 S split	1045								
Ditto Ni flake	▨	1780	983	1085	1078	1110*	1092 x	1070 x	1047	SS	997 S	970								
4 lbs 6.22		1781	960	1065	1060	1057	1066 x	1037 x	1023	SS	982 S	977								
		1782	967	1087	1087	1092	1095 x	1098 x	1100	BS	1070 Badly split	1080								
do	▨	1783	965	1045	1057	1047	1030 x	982 x	963	S	930 S	900								
4 1/2 lbs		1784	993	1131	1142	1155	1162	1135	1135	S	1100 ?	1100								
6.3		1785	965	1075	1072	1090	1100	1077	1080	SS	1047 S	1060								
Do 5 lbs	▨	1786	965	1060	1042	1070	1055 x	1030 x	990	S	945	920								
6.45		1787	902	1000	992	1005	1006	1000	1012	S	992	1020								
		1788	927	1050	1045	1062	1062	1048	1040	S	1017	1035								
2400-005-burs ground		1789	950	1130	1160	1162	1172	1115	Co											
1 washing green 10Co24g		1790	1030	1172	1200	1217	1153	922												
3 lbs square side fused		1791	950	1115	1158	1180*	1085	827 x												
Dup 1789 5.40		1792	1000	1160	1196	1235	1245	1163	948	S	Co									
3 1/2 lbs		1793	1035	1165	1157	1217	1227	922	825	BS	Co									
		1794	1025	1200	1210	1222	1228	900	592	BS	Co									
Dup 1789 5.76		1795	1000	1156	1205	1232	1237	970	790	BS	Co									
4 lbs		1796	1013	1173	1197	1237	1241	1207	920	BSB	Co									
		1797	935	1120	1140	1167	1167	1032	763	BSB	Co									
Dup 1789 5.88		1798	892	1071	1116	1110*	1133	762	595	BS	Co									
4 1/2 lbs		1799	900	1123	1132	1135	1142	1143	960	BSB	Co									
		1800	905	1112	1135	1136	1125	1112	1050	SS	Co									

3)3100
1033

3)3170
1057

78
3)3159
10

3)2605
868

3)2954
985

3)2365
788

3)2473
824

005. Stock used –

		Cold	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
Dep 1787 5 lbs 5.92	1801	895	1070	1100	1117	1142	1143	1122 s.o	572	500								
	1802	895	1050	1075	1126	1143	1145	013 os	520	500								
	1803	847	1015	1076	1107	1120	1113	04 3, ss	800	740								
auto sidefeed 10 Co 24 g 005 2400 3½ 4 gr KCl	1828	1141	1135	1175	1075													
	1829	1137	1128	1130	785x													
	1830	1105	1098	1040	656x													
Dup 2 grm KBr	1831	1162	1137	1180	1087x													
	1832	1162	1138	1172	1100x													
	1833	1150	1130	1150	1098x													
Dup 4 KBr	1835	1145	1137	1007	790x													
	1836	1162	1047	907	927x													
	1837	1167	1130	1078	972x													
Ni flake 5.22 ▨ 3½ 10 Ni 24 g 005- Reg sidefeed Reg green 2 grms KCl mf 8001	1838	1000	1000	997	966	975	920	930										
	1839	1002	1015	998	970	975	940	962										
	1840	983	975	992	975	984	945	962										
Ni flake ▨ Dep 1838 4 grms KCl 5.47	1841	978	1038	1037	1060	1062	1000	987										
	1842	958	955	977	1000	980	932	932										
	1843	942	935	1007	1000	995	987	900										
Ni flake ▨ 2 grms KBr 5.60	1844	940	915	925	925	935	870	887										
	1845	955	940	957	957	965	887	897										
	1846	963	941	962	962	965	890	890										
Ni flake ▨ 4 grms KBr 4.99	1847	1008	985	1010	990	1007	972	975										
	1848	1031	1010	1027	1012	1037	975	980										
	1849	1035	1025	1030	1012	1017	970	980										

Co

Co.

Co

		Cold	50	100	150	200	250		300	350	400	450	500	550	600	650	700	750	800
1 wash in percolator 5.76	1977	1073	1100	Co															
	1978	1086	1115																
	1979	1092	1190																
Dup 1977 = Co 5.14 Except 2 washing	1980	1190	1155	Co															
	1981	1175	1143																
	1982	1187	1160																
Reg grain 24 10 off 005 stock 4.53 6 Rings on	2004	1117	1177	1282	1158	862	722	Co											
	2005	1122	1235	1298	1162	971 5	837												
	2006	1100	1150	1257	1132	1030	800												
5 grms Hard rubber shavings — 4.59	2085	1125	1175	1211	1232	815	Co								Never had Get 1st 50 run with Rubber				
	2086	1148	1187	1247	1242	675													
	2087	1005	1168	1232	1200	602													
5 grms powdered Tin	2109	1210	1135	745 5	Co														
	2110	1185	1062	583 5															
	2111	1165	1037	485 5															
2 grms Paper 4.60	2112	1137	1181	1200	832	Co									Never had paper in Except 1st 50 Runs				
	2113	1131	1167	1207	697														
	2114	1133	1185	1228	700														
4 washings in percolator 4.77	2118	1087	1125	1152	1193	Co													
	2119	1123	1145	1150	1212														
	2120	1142	1170	1182	1218														
5 washings 4.78	2121	1125	1147	1170	1205	Co													
	2122	1130	1146	1162	1195														
	2123	1155	1175	1188	1162														
5 grms Hard Rubber Chips — 4.59	2085	1125	1175	1211	Co														
	2086	1148	1187	1247															
	2087	1005	1166	1232															

Dup 1804		Cold	50	100	150	200	250		300		350	400	450	500	550	600	650	700	750	800
Except 2 grm LiOH Each cell –	2136	1145	1196	1267																
	2137	1151	1202	1275																
	2138	1137	1192	1303																
4 grm LiOH. Each Cell Reg 21% KOH.	2139	1132	1160	1300	Co															
	2140	1125	1171	1291																
	2141	1122	1135	1286																
8 grm LiOH Each cell 21% KOH. 4.70	2142	1030	1010	960																
	2143	1055	1015	1195																
	2144	1060	1020	1085																
3 washings percolator	2184	1083	1160	1212	1212	1232	Co													
	2185	1147	1165	1200	1078	610 x														
	2186	1160	1212	1232	1235	1242														
Top of pocket loose	2202	955	990	1005	1030	1050	735	Split	750	Co										
1/64 bent to stand with	2203	990	1017	1032	1045	1070	700		427											
	2204	1040	1027	1070	1060	960	560	Bad Split	412											
6 washings in percolator 4.72	2205	1081	1145	1157	1135	1160	Co													
	2206	1096	1150	1170	1133	1152														
	2207	1102	1168	1167	1060	1050														
Reg green 4.86 7 washings Percolator	2208	1066	1155	1212	845	650	587		Co											
	2209	1088	1150	1228	1030	875	723													
	2210	1118	1171	1197	892	867	750													
Ditto 4.77 8 washings –	2211	1103	1167	1206	982	892	780													
	2212	1108	1167	1053	897	822	800													
	2213	1112	1177	1200	920	967	922													
2 grms Sulph Soda Each cell –	2187	1102	1137	1120	1147	905	800		Co											
	2188	1087	1120	1107	1142	962	807													
	2189	1167	1130	1121	1143	887	722													

	250	300	
2187	800		
88	807		
89	722		
90	735	682	Sulphate Na
91	802	717	Hot.
92	720	700	

		Cold	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
No wash air dried washed free NaOH. Dried on heater 200 Fahr 4.320	2217	1066	1145	1107	1131	Co												
	2218	1080	1135	1100	1105													
	2219	1052	1115	1065	1035													
1/2 wash air dried washed free NaOH. heated on heater 200 F 4.320	2220	1047	1128	1067	1075	Co												
	2221	1075	1160	1110	1100													
	2222	1048	1142	1060	1061													
RA 662 - 91% Ni.OH 9% Bi_2O_3 thru 20 10 Cf - 4.34	2223	987	Co															
	2224	956																
	2225	1027																
RA 90% NiOH. 10% $Co_2(OH)_6$ thru 20. 10 Cf - 5.41	2226	971	Co															
	2227	986																
	2228	1013																
RA 90% $NiOH_2$ 10% Bi_2O_3 mixed together paste, 10 Cf flake 4.92	2229	1147	Co															
	2230	1130																
	2231	1147																
90% NiOH's Bi_2O_3's made by precip $NiSO_4$ & $BiNO_3$ by KOH, when mixed KOH used to precip 4.02	2232	970	Co															
	2233	897																
	2234	970																
RA 718 thru 20 no wash air dried washed & dried Reg pk already finer than 20 m 4.77	2235	1183	1202	Co														
	2236	1207	1207															
	2237	1200	1187															
RA 719 No wash air dry washed + dried already finer than 20 m - 4.67	2238	1152	1082	Co														
	2239	1172	1112															
	2240	1133	1050															

		Cold	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
Ra 745 - no wash Not filtered air Dried Dried Low heat percolated - 4.67	2241	1121	1097	Co														
	2242	1121	1145															
	2243	1110	1112															
Ra 752 no wash Dried low heat Cobalt free 5.28	2244	1047	1022	Co														
	2245	1063	1007															
	2246	1073	1050															
Ra 744 - no wash filtered air Dried, Low heat, percolated 4.80	2247	1212	1166	Co														
	2248	1187	1170															
	2249	1205	1135															
Ra 765 10 x 24 Co fl Reg - 005 - 2400 - very sticky in machine 6.44	2250	682		Horribly Bent Split won't go over head			CO											
	2251	682																
	2252	650																
Ra 767 - 10 C 247 005 - 2400 - 4.70	2253	1197	1177	Co														
	2254	1212	1136															
Ra 768 - Dup 2253 4.70	2255	1165	1150	Co														
	2256	1197	1150															
Ra 769 - Dup 2253 5.25	2257	1175	1161	Co														
	2258	1208	1186															
Ra 770 Dup 2253	2259	1207	1183	Co														
	2260	1230	1195															
Ra 771 Dup 2253 4.92	2261	1177	1140	Co														
	2262	1170	1136															
Ra 772 Dup 2253 4.82	2263	1235	1192	Co														
	2264	1182	1156															

All tubes after 2306 chgd dis 8 hours

2270 not on this book
73
74
74

		Cold	50	100	150	200	250
RA 766 Dup 2253	2267	1175	1137	Co			
	2268	1200	1075				
	2269	1180	1110				
RA 711 A.	2281		1101	Co			
4.31	2282		1128				
	2283		1120				
Ra 749.	2290		717	Co.			
4.17	2291		720				
RA 750.	2292		910	Co			
4.23.	2293		937				
RA 751	2294		717	Co			
4.02	2295		925				
RA 748 4.25 no wash and dried	2296		750	Co			
not fettled.	2297		722				
RA 788	2298		1092	Co			
5.04	2299		1077				
10 Co 24 3½ cut 2400.005	2300	1173	1100	1162			
CP Cobalt anodes (8 hours chgd)	2301	1185	1092	1170			
	2302	1192	1112	1175			
Run Cold	2303	1250	1100	1077			
	2304	1192	1095	1150			
4.77	2305	1190	1090	1135			
Dup 2300 Except	2306	1190	1050	1090			
Except New process Iron Cutting -	2307	1150	1062	1125			
Run Cold 4.48	2308	1200	1102	1155			

S

300 350 400 450 500 550 600 650 700 750 800

	100
2270 -	835
71	997
72	865
2275	627
76	565
77	820
78	725
79	858
80	672

Co

all bad Split & bad Rings broken on 2276.

Everything after 2300
6 1/2 hours 200 chg 5½
dia -180

6½ chg

		Cold	50	100	
Dup 2306 Cutting iron Run hot 8 hours ca-dia 4.69	2309	1170	987	790	570
	2310	1210	1057	822	692
	2311	1207	1042	857	617
Dup 2306 Cutting iron Run hot reversed once week 4.72	2312	1197	1192	1010	
	2313	1143	975	1010	
	2314	1130	1011	1002	
Dup 2300 Reg iron Except 9 Co flakes 1 Ni 4.80	2315	1145	Co		
	2316	1188			
	2317	1191			
Dup 2315 Except 8 Co 2 ni flakes 24 g — 4.90	2318	1150	Co		
	2319	1135			
	2320	1155			
Dup 2315 Except 7 Co 3 ni flake 4.70	2321	1112	Co		
	2322	1140			
	2323	1127			
Dup 2315 6 Co 4 ni flake 4.83	2324	1172	Co		
	2325	1172			
	2326	1165			
Dup 2315 5 Co 5 ni flake 4.90	2327	1146	Co		
	2328	1132			
	2329	1147			
Dup 2315 Except 4 Co & 6 ni — 4.90	2330	1135	Co		
	2331	1132			
	2332	1125			

	2333	520	Co
Flat pockets /	2334	547	
see 2333	2335	550	
A-	2336	522	
	2337	538	
greaselbs 30 mach furn in 10 @ 24 g Reg pk 2400-005-3½	2338	1182	Co
	2339	1210	
4.43	2340	1186	
Dup 2338 Except greaselbs 40	2341	1182	Co
	2342	1182	
4.31	2343	1182	
Dup 2338 Except g lbs 50	2344	1183	Co
	2345	1158	
4.22	2346	1140	
Dup 2338 Except g lbs 60	2347	1215	Co
	2348	1185	
4.40	2349	1215	
Dup 2338 Except g lbs 100	2350	1097	Co
	2351	1097	
	2352	1112	
	2353		
	2354		
	2355		
	2356		
	2357		
	2358		

6½h chg

		Cold	50	100	150
	2359				
	2360				
	2361				
2400-005-10Co 24g Reg pack Run in 18% KOH 3% K_2CO_3	2362	935	952	872	
	2363	937	970	1017	
	2364	927	962	957	
Dup 2362 Except 16% KOH 5% K_2CO_3	2365	975	958	832	
	2366	965	937	845	
	2367	971	930	835	
Dup 2362 13% KOH 8% K_2CO_3	2368	827	811	822	897
	2369	787	823	895	892
	2370	857	835	867	980
Reg 2400-005-Reg Everything Except 6 rings	2371	1107	1110	975	800
	2372	1100	1125	1110	912
	2373	1120	1140	912	807
Dup 2371 Except 8 Rings	2374	1107	1160	1067	1015
	2375	1115	1150	1087	917
	2376	1107	1115	875	897
	2377				
	2378				
	2379				
Reg 2400-005-Reg 10Co 24- 6 rings 10 gm KCl.	2380	1007			
	2381	1070	all went bad after 1 week on hot test -		
	2382	1062			
	~~2383~~				

CO

CO

6 1/2 hours dry

		Cold	50	100		
Dup 2380 except 8 Rings 10 g KCP	2383	1057				CO
	2384	1087				
	2385	1050				
	2386					
	2387					
	2388					
	2389					
	2390					
	2391					
	2392					
	2393					
	2394					
21 Holes .005 4 rings 10 Co 24 g reg pk	2395	1085				
	2396	1067	Co			
	2397	1065				
Dup 2395 bent with .0035 stock -	2398	1085	1175	1175 B	1180	
	2399	1057	1137	1160 B	1165	
	2400	1086	1177	1152 B	1130	
Dup 2395. 21% KOH Containing 10 grms KCP	2401	1035	912	Co		after 5 Cold 50 Hot
	2402	1050	920			
	2403	1016	1060			
Dup 2398 Except run in 21% KOH containing 10 grms KCP	2404	1103	1137	1060	995	1 bw Grate "
	2405	1041	1040	850 seam op	482	Seam open 1 Bent considerably
	2406	1105	1050	707 seam op	800	1 Very good yet 1 Bent good dent

5=50-5	904	50033	97	13+107	13+149 same condition
good but bent	158	170 BB	150	148	Bent & Swelled
Starting to bend	240	239 bent swelled	225	238	seam opp swelled
bent much but OK	120	BB 125	120	122	Seam opp bent

6½ hour chg

				50	100	150	200	250	
2400 10Co 24 gr 3 [illegible]		2407	1070	1112	1082	950	632	400	Co — Split 4 places
		2408	1088	1100	1107	930	790	583	" 3 places
		2409	1075	1095	1135	800	880	787	
Ni flake 10-0001 not Hydgn 3½ wt 2400-005 4 rings 5.33 Reg pk	▨	2410	908	835	847	845			
		2411	912	815	825	825			
		2412	915	837	857	880			
Dup 2410 -	▨	2413	933	795	767	747			Investigate this
		2414	895	807	812	830			
		2415	920	847	837	847			
Ni flake same as 2410 run in 21% KOH with 5.25 10 grms KCl .005	▨	2416	912	Co all went bad in few days most were bad after 5 Cold runs					
		2417	915						
		2418	932						
Ni flake 8 Co f 2 24 g- 2400-005 3½ wt. 4 rings 10 grms KCl-		2419	970	Co					
		2420	1030						
		2421	1100						
Dup 2419 Except Ni flake 7 Co 3- 10 grm KCl-		2422	1007						
		2423	1063						
		2424	1077						
6 pts Ni flake 4 Co f 10 grms KCl-		2425	1107	Co					
		2426	1077						
		2427	1097						
5 Ni 5 Co flake- 10 grms KCl-		2428	1100						
		2429	1025						
		2430	1155						

			50	100	150	
10 nickel f 0001 no Hydrog	2431	903	677	587	570	
21 Hole 005 3½ CB cut	2432	907	690	625	572	
pk reg 4 rings ▨	2433	917	872	890	907	
Dup 2431 Except Co flake	2434	1042	Co			
21 hole 005 4 rings —	2435	1028				
	2436	1040				
Dup 2434 Except	2437	992	Co			
7 Ni 3 Co flake 21 hole	2438	992				
005 4 rings 3½	2439	1000				
Dup 2434 Except	2440	958	Co			
8 Ni 2 Co flake	2441	952				
21 hole 005 3½	2442	945				
10 Co tough not run thru H.	2443	800	1181	1067	Co	
Freaky	2444	537	1170	1115		
	2445	800	1200	1122		
2400-005 4 rings	2449	1150	1232	1222	930	Bad split
10 Co 24 3½ cut reg pack	2450	1155	1222	1030	732	"
21% KOH 100 mlg LiOH Each cell 4.52	2451	1172	1223	1212	900	"
Dup 2449 Except	2452	1167	1245	1097	700	"
250 mlg LiOH each cell	2453	1157	1262	1082	670	"
4.60	2454	1161	1225	1082	750	"
Dup 2449 Except	2455	1207	1285	S 3 places 1115	675	"
500 mlg LiOH each cell	2456	1137	1263	1132	672	"
4.68	2457	1132	1262	Split 3 places 1208	427	"

Co

to Holland

Look at these -

			50	100	150	
Dup 2449 Except	2458	1200	1275	S 4 pl. 895	482	Badly Split & swollen
1 grm LiOH each cell	2459	1212	1270	S 3 pl. 805	420	″
4.59	2460	1160	1297	seam split 615	390	Co
Dup 2449 Except	2461	1170	1262	split whole length 725	437	″
1½ grms LiOH	2462	1162	1291	S 2 pl. 890	430	″
Each cell. 4.52	2463	1200	1246	S entire length 688	450	″
21 Hole across 005 4.62	2464	1132	1230	1245	832	465 Badly Split
4 Rings – Co flake	2465	1127	1235	1272	1017	827
Reg pk 1 grm LiOH Each cell. 21% KOH-	2466	1152	1267	1222	500	249 Bad Split 3 pl. Sea of Split.
Dup 2466 Except	2467	1095	1240	1185	1017	
2 grms LiOH. 4.57	2468	1142	1292	1297	927	
	2469	1142	1247	1267	1220	
21 Hole block 005 ▨ 10 mf 249 – 4 rings	2470	892	992	1012	1015	
2 grms LiOH. 5.27	2471	890	992	995	1000	
	2472	892	1000	1012	1022	
Dup 2470 ▨	2473	865	882	850	890	
Except cell filled 15% KOH & 2 grms LiOH.	2474	850	900	882	900	
Each cell- 5.31	2475	845	895	875	892	
Dup 2464 Co flake 15% KOH-	2476	992	1082	990	935	
2 grms LiOH- 4.52	2477	1017	1117	1117	1060	
9	2478	1008	1115	1087	1050	
Reg 2400 005 - Co f.	2479	1125	1215	1095	1010	Bad Split
15% NaOH, 4.60	2480	1122	1135	S 1075	677	″
2 grms LiOH.	2481	11.40	1212	SS 1145	847	Co

Evidently LiOH. attacks Cobalt flake probably amalgamates, + then becomes active or its the increase of Capacity that does it,

June 3rd 1907 examined cells OK strait seam no more bent than original + OK – tubes Brown Fe clean –

23% KOH	A	2145	1140
		2146	1130
		2147	1132
25% KOH		2148	1137
		2149	1177
		2150	1182
27% KOH,		2151	1225
		2152	1215
		2153	1210
29% KOH,		2154	1232
		2155	1238
		2156	1237
19% KOH		2157	1077
		2158	1082
		2159	1087
17% KOH		2160	1035
		2161	1041
		2162	1022
15% KOH		2163	1005
		2164	972
		2165	967
13% KOH.		2166	932
		2167	940
		2168	942

Co 3)3707
1236

3)2944
981

		Cold	50	100
21 Hole .005 Ni f .0001 Matt H. 9 flake 24 gr Spiral Reg green 4.37	2488	987	960	970
	2489	992	957	987
	2490	993	965	987
Dup 2488 Except 8 Ni f .0001 24 Reg green Spiral 4.25	2491	977	930	942
	2492	983	945	945
	2493	945	907	910
Dup 2488 Except 7 Ni f 24 green Spiral 4.22	2494	1007	950	942
	2495	1013	965	960
	2496	1021	970	942
Dup 2488 Except 6 Ni f .0001 24 gr. 21 .005 Spiral 2.41 4.11	2497	1015	935	910
	2498	965	895	877
	2499	1000	887	850

24 hole .005 burs off Ni flake ~~treated~~ 4 rings KCy after heating washed 4.43 Reg Copper Sol	2482	920	900
	2483	917	862
	2484	965	925
Dup of 2482 Except 21 Hole slack 4 Rings 4.22	2485	882	872
	2486	952	935
	2487	975	967

		Cold	50 20 Run	100 60 R	80	100	120	141	160
11% KOH.	2169	896							
	2170	882							
	2171	880							
9% KOH.	2172	855	Co						
	2173	840							
	2174	852							
A	2333	510	525	475	445	380	297	335	305
Reg pockets	2334	513	530	477	440	382	305	322	292
Reg grafite Mix.	2335	502	520	462	440	382	302	325	292
	2336	503	526	475	447	377	300	312	295
X	2337	512	528	475	442	375	307	312	285
A	2315	1097		473	443	349			
9 Co flake 1 Ni flake	2316	1082	Co						
	2317	1100							
8 Co 2 ni flake	2318	1080							
	2319	1067	Co						
	2320	1073							
7 Co 3 ni	2321	1082							
	2322	1075	Co						
	2323	1084							
6 Co 4 ni	2324	1075							
	2325	1060	Co						
	2326	1053							
5 Co 5 ni	2327	1030							
	2328	1025	Co						
	2329	1027							

90% of 2nd 5 Run - 6th 200
dis 180
on board 200 150

This cell has 21% KOH, saturated with LiOH, after it has had 160 Hot runs — to run 20 Hot Runs —

If made cuts ē 18-288 caps then 2nd or highest chge for cell would be 62

151 - 40 Runs
136 60 "
127 - 80 "
109 100 "
86 - 120 "

280% 100 run loss

I figured reduction a 1020 cube to 735-

187
295
292
297
295
205 — Had Lithium in it last 20 runs-

			Cold	50	100	150	200	250
4 Co 6 Ni flake	A	2330	1030	Co				
		2331	1017					
		2332	1010					
No wash dried Low heat.	A	1983	1165					
		1984	1167					
		1985	1172					
½ wash Dried low heat	A	1986	1200					
		1987	1192					
		1988	1160		Co			
½ wash Dried high heat	A	1989	1107					
		1990	1135					
		1991	1125					
No wash Dried high heat.		1992	1212					
		1993	1197					
		1994	1182					
4 grms K Sulfate. 10 Cofl 24 gr		2190	1112	1127.		1142	1021	776 x x
		2191	1115	1126		1142	961	797 x x
		2192	1105	1127		1146	1060	633 x x
Ni Peroxide made by Dr Grothe No 19 — Req 5.27		1998	895	1100	868$_s$			
		1999	867	1096	873$_s$		Co	
		2000	865	1135	1082			

2826 w Bi 25 Fe 75 +
[illegible] as nickel
Hottest,

all nickel of Cake -

		Cold	50	100	150
0001 Ni flake not H. n-21	5000	1081	1030	1050	1062
10 Ni 24 g used in 250	5001	1075	1032	1045	1065
1983 - no wash dried low heat 4 Rings 26X30 .005 4.87	5002	1068	1032	1055	1067
Dep 5000	5003	1082	1047	1062	1070
green wood in 1986 1/2 wash dried, low heat	5004	1070	1045	1070	1077
2.19 4.92	5005	1083	1045	1072	1090
Dep 5000 -	5006	1042	1000	1025	1042
green of 1989 - 1/2 wash dried high heat.	5007	1030	982	1020	1027
1.95 5.39	5008	1087	1040	1090	1087
Dep 5000	5009	1093	992	1027	1032
green wood 1992 no wash dried high heat	5010	1105	1042	1072	1085
2.06 5.35	5011	1111	1025	1070	1085
Dep 5000 , 5.52	5012	1056	1000	1062	1075
green one wash in Percolator	5013	1055	1003	1055	1075
1.93	5014	1083	1025	1057	1057
Dep 5000 4.77.	5015	1015	941	945	962
2 washings percolator	5016	1022	950	962	992
2.16	5017	1057	977	990	985
Dep 5000 4.65	5018	988	900	950	970
4 washings Percolator	5019	992	900	930	967
2.13	5020	1000	900	925	970
Dep 5000	5021	993	887	922	950
8 washings Percolator	5022	1018	900	932	942
n-21 4.56	5023	1015	900	942	962

of percolations
about 5 mah gain 1 percolation
others lost about 50 mah 150 Runs

All Ni flake

		Cold	50	100	
Dup 5000 greenware on RA 752 in No 2244 5.08	5024	982	838	860	) Co
	5025	967	830	850	
	5026				
Dup 5000 4.56 Except RA 744 Aluminized in 2247	5027	975	913	950	962
	5028	980	922	952	982
	5029	978	935	960	975
Reg Ni flake 0001 not H. 005 26X30 New process HgCl now 5 gm 2.12 4.53 ▨	5030	981	908	917	935
	5031	972	900	930	947
	5032	956	875	920	942
Dup 5030 New process Cutting time 2.1 4.56 ▨	5033	960	900	932	
	5034	950	888	920	
	5035	973	912	942	
Dup 5030 4.55 New process Cutting time Recoated once week 2.1 ▨	5036	962	900	907	
	5037	952	912	895	
	5038	962	900	915	LiOH
Ni flk 0001 4.63 not H 26X30 005 3½ wt 4 mils Run 33% KOH 4.613 ▨	5039	1142	712	640	542
	5040	1120	717	645	562
	5041	1106	725	632	545
31% KOH 4.54 ▨	5042	1092	682	657	600
	5043	1085	557	482	367
	5044	1118	700	690	567
29% KOH, 4.41 ▨	5045	1076	805	755	727
	5046	1077	822	797	742
	5047	1081	833	745	690

apparently green is hurt,

Had this group changed to 21%
+ Rev 12 hours at 200 rate
& then run on 60 and 5 [illegible]

		Cold	50	100		
	~~5047~~					
27% KOH, 4.62	5048	1031	870	850	827	
	5049	1031	825	835	827	
	5050	1036	837	845	825	
25% KOH, 4.57	5051	1010	881	882	870	
	5052	1012	915	925	917	
	5053	1015	920	920	937	
23% KOH 4.61	5054	990	910	915	917	
	5054½	986	886	912	915	
	5055	982	900	925	935	
21% KOH 4.62	5056	961	908	940	962	
	5057	982	887	910	895	3)2797 932
	5058	982	918	932	940	
19% KOH 4.57	5059	950	982	950	985	
	5060	957	932	950	972	3)2924 974
	5061	950	935	942	967	
17% KOH, 4.59	5062	943	922	925	962	3)2904 968
	5063	922	931	945	967	
	5064	938	941	957	975	
15% KOH 4.61	5065	907	930	942	962	
	5066	900	917	942	962	3)2879 959
	5067	891	897	932	955	
13% KOH 4.59	5068	866	882	920	950	
	5069	872	887	920	942	3)2804 934
	5070	870	875	902	912	

		Cold	50	100	150	
	~~5070~~					
11% KOH, 4.53	5071	835	860	885	885	3)2654 885
	5072	830	852	872	882	
	5073	820	852	890	887	
9% KOH, 4.58	5074	745	810	802		
	5075	755	820	812		
	5076	758	808	790		
Ra 90% green 10% B_2O_3 ✓ Dup of 2229 thick flake	5077	872	801	765	CO	
	5078	877	795	775		
	5079	876	808	807		
[illegible]	5080					
	5081					
	5082					
	5083					
	5084					
	5085					
	5086					
	5087					
	5088					
	5089					
	5090					
	5091					
	5092					

		Cold	90	100	
	5093				
	5094				
	5095				
	5096				
	5097				
	5098				
	5099				
Ni flake Not thro H— .0001 Strips cut 30/1000 wide	5100	962	900	835	750
thro 20 10 f 24 g — 26X30 hole	5101	957	932	930	932
3½ Lbs 005 4 rungs burs ground 2:21 4.31 ▨	5102	945	887	877	862
Ditto Cut 20/1000 wide	5103	980	915	870	790
	5104	955	906	867	832
4.41 ▨	5105	967	928	912	907
Dup of 5100	5106	922	887	882	877
Except 21 hole 005 stock	5107	900	867	862	832
2:18 4.22 ▨	5108	938	895	865	840
Dup 5103 4.26	5109	923	897	895	835
Except 21 hole 005 stock	5110	962	712	637	560
2:23 ▨	5111	955	917	897	822
Ni flake ½ thick Not thru H	5112	985	935	955	950
26x30 hole 005 burrs off	5113	986	950	950	952
[illegible] pk 10 f 2 fg 3½ 2:33 4.24 ■	5114	997	965	955	967
9 fl ½ thick	5115	1005	975	987	972
	5116	1001	980	992	980
2:29 4.37	5117	1000	982	992	983

Investigate this

loss between 10 + 3 flake about same

			Cold	50	100	150
Dup 5112		5118	998	976	990	980
Except 8 Ni fl 1/2 thick		5119	986	960	972	967
24 g — 1.20 4.47	▨	5120	996	972	1005	987
Dup 5112		5121	997	972	990	972
Except 7 flake 1/2 thick		5122	1002	1010	995	980
24 g 2.09 4.60	▨	5123	1005	981	1005	982
Dup 5112 4.81		5124	1020	995	1017	977
Except 6 flake 1/2 thick		5125	1002	981	1007	975
24 g · 2.1	▨	5126	1006	973	1000	980
Dup 5112 4.93		5127	987	962	997	965
Except 5 flake Ni 1/2 thick		5128	987	970	995	977
24 g · 2.0	▨	5129	996	976	977	962
Dup 5112 5.07		5130	1007	985	992	957
Except 4 Ni flke 1/2 thick		5131	982	981	977	967
24 g — 1.95	▨	5132	985	983	985	962
Dup 5112 5.09		5133	1002	992	1000	950
Except 3 Ni flake 1/2 thick		5134	1000	1005	1007	962
24 g — 1.99	▨	5135	995	977	980	935
Reg Ni flake 0001 which has been thru Hydrogen very		5136	911	890	895	
dull red at right [illegible] 26X30 holo ods 4 lump		5137	900	835	815	
Reg pk — 4.77	▨	5138	912	870	850	
Dup 5136		5139	920	860	850	
Except 5 Lump →		5140	925	777	865	
4.77	▨	5141	925	850	820	

Co

5167 busted early but to 12th 5166 OK 28 Hot.

		Cold	50	100	150	
Dup 5136	5142	900	855	860		Co
Except 6 Rings	5143	918	900	875		
4.82 ▨	5144	915	891	900		
Req .0001 Ni flake not Thru H - 3 lbs -	5145	930	905	927	925	
26X30 hole .005 burn off	5146	940	923	942	920	
Req pk - 4 rings 4.47 ▨	5147	940	918	935	937	
Dup 5145	5148	922	906	930	920	
Except 5 Rings	5149	922	915	920	900	
4.50 ▨	5150	931	927	932	937	
Dup 5145	5151	960	936	930	915	
Except 4 lb cut	5152	977	950	947	950	
4 rings 4.71 ▨	5153	990	950	940	930	
Dup 5145	5154	942	950	932	925	
Except 4 1/2 lb cut	5155	947	917	917	895	
4 Rings 4.77 ▨	5156	957	935	937	920	
Ni flake .0001 not thru H	5157	900	880	882	870	
21 Hole 4 lbs cut 4.60	5158	892	865	870	872	
4 Rings - 4 lb cut ▨	5159	881	875	872	815	
Dup 5157 4.60	5160	900	906	917	840	
Except 5 Rings	5161	900	892	900	825	
▨	5162	915	870	870	800	
21 Hole Co flake 4.5	5163	991	1050	892		Co
10 Co f. 24 g. one turn	5164	1012	1062	895		
Spiral hole. Cobalt						
4 Rings	5165	1007	1107	965		
Dup 5163 4.45	5166	1050	970	767		Co
10 grams KCP. Co	5167	1027	Co			

5-50		70 Hot	9+92
BK - 230	230 Seam opening	230 Seam opening	228 Seam opening swelled

Solution changed to 21%

21 Hole 1/2 turn Reg Ca flake 10 gr 24 Co	5168	937	1007	937		O
	5169	970	1017	877 850		
	5170	917	983	775 *	NaOH	
26X30 005 3 1/2 46 10 mf 0001 not th 24 g 4.22 Running 33% NaOH	5171	530	150	580		O
▨	5172	410	400	420		
	5173	500	422	575		
Dup 5171 4.19 31% NaOH,	5174	690	670	600		O
	5175	725	735	665		
▨	5176	730	750	685		
Dup 5171 4.24 29% NaOH,	5177	850	900	800	665	
	5178	720	992	645	565	
▨	5179	837	872	690	622	
Dup 5171 4.31 27% NAOH,	5180	1045	990	735	640	
	5181	1047	996	825	650	
▨	5182	1083	1008	850	940	
Dup 5171 4.26 25% NaOH,	5183	1125	1005	850	757	
	5184	1138	972	785	717	
▨	5185	1182	998	895	727	
4.30 23% NaOH	5186	1087	1032	940	772	
	5187	1070	991	900	707	
▨	5188	1083	992	880	800	
4.29 21% NaOH.	5189	1050	982	900	797	
	5190	1047	998	885	850	7 2512 837
▨	5191	1045	998	930	865	

21% put in & Reversed 200 rate for 12 hours then run req 5 times on 60 and — what did it do —

Told him Empty out NaOH. put in 15% NaOH soak 24 hours then 15% NaOH & 2 grams Lithia Hydrox run on board

2:34

		Cold	50	100	
19% NaOH.	5192	1005	908	850	
	5193	1045	897	850	3)2577 859
4.30 ▨	5194	1000	911	877	
17% NaOH.	5195	980	907	880	
	5196	977	905	890	3)2662 887
4.31 ▨	5197	988	910	892	
15% NaOH,	5198	942	910	897	
	5199	945	902	877	2669
4.26 ▨	5200	947	910	895	
13% NaOH.	5201	895	907	900	
	5202	910	906	915	3)2710 903
4.26 ▨	5203	900	895	895	
11% NaOH	5204	867	912	900	
	5205	870	917	900	3)2697 899
4.24 ▨	5206	875	912	897	
9% NaOH,	5207	827	892	847	
	5208	835	900	877	2)1724 862
4.18 ▨	5209	787	840	650	
7% NaOH 4.25	5210	790	840	825	
	5211	798	837	785	
▨	5212	793	812	785	
2400 ooz Roger zylet Beurs ground 4 Rugs	5213	950	932	870	
10 Ni flake reg ooo 1	5214	952	927	877	JC
Not H! 3 x 24 g reg pk 4.18 ▨	5215	940	925	872	

Investigate.

Low weights of green in Links due to (too much fines – ground improperly – 4.45# of green of right

9 in group	5216	978	922	900	
	5217	897	792	745	
4.19	5218	960	887	852	CO
	5219	940	890	840	
	5220	982	755	582	
▨	5221	973	962	940	
Dup of 5213	5222	840	842	800	
	5223	922	910	882	
Except 5 Rings	5224	910	875	837	
	5225	962	852	920	CO
4.15	5226	972	958	925	
	5227	970	955	917	
	5228	950	953	922	
2.26	5229	960	920	887	
▨	5230	965	940	937	
2400 005 Burs not ground off – 10 hi	5231	967	925		
	5232	965	925		
0001 3½ lbs lot,	5233	995	952		
4 rings 24 reg grain	5234	975	933	900	
Reg pk not H,	5235	987	951	917	CO
	5236	977	923	930	
4.12	5237	978	936	912	
	5238	970	878	807	
2.37 ▨	5239	964	926	917	

~~There is probably less green so since we have found~~

— Investigate, test green to flake also

— Investigate,

Then run 5 times on board – + put back on 1st of test

These taken off hot run after 50 & Reversed

			Results
5231	3	hours	890
5232	6	"	887
5233	12	"	925

Bud green too much fuses it.
didn't find it out

Dup of 5321 Except 5 Rings 4.17 ▨	5240	975	945	932	Co
	5241	962	926	917	
	5242	967	900	880	
	5243	978	928	910	
	5244	970	922	912	
	5245	975	935	922	
	5246	977	938	917	
	5247	975	928	912	
	5248	950	921	885	
Stock 26x30 .005 burn off - 3½ LB cost 4 Rings - Req pack nifl 10.0001 not H. green 24 thru 20 fuses in 2.36 4.12 ▨	5249	1000	955	915	Co
	5250	1000	962	937	
	5251	1012	962	932	
	5252	980	912	880	
	5253	945	860	832	
	5254	1002	930	897	
	5255	1016	960	935	
	5256	985	917	897	
	5257	1005	950	937	
Dup of 5249 Except 5 Rings 4.15 ▨	5258	1007	950	912	Co
	5259	972	911	890	
	5260	972	863	812	
	5261	1006	931	907	
	5262	997	945	930	
	5263	985	897	855	

Last part	5264	982	897	860		
2.38 9 in group -	5265	980	937	930		
	5266	1000	950	912		
Stock 21 holes across	5267	942	910	860	Co	
005 - Bars off.	5268	907	850	825		
3½ lb lot, 4 rings	5269	870	847	835		
Reg pack 10 ni	5270	892	842	905		
flake 0001 Not H.	5271	927	868	837		
24 green thru 20	5272	921	872	867		
[illegible]	5273	946	900	895		
4.16 ▨	5274	792	695	670		Investigate something originally rotten,
2.7	5275	935	845	842		
Dup of 5267	5276	961	905	885	Co	
	5277	952	892	870		
Except 5 Rings -	5278	985	918	905		
	5279	957	887	835		
	5280	896	810	742		Investigate,
4.04	5281	946	880	885		
	5282	960	876	835		
▨	5283	951	885	850		
2.35	5284	960	895	847	Co	
Stock big punched holes	5285	935	907	892		
005 10 ni f 0001 not H - Reg pk 3½	5286	982	905	837		
lbs 24 Rings -	5287	895	843	792		Investigate
▨						

Really 1.94

9 in group
See [illegible]

4.15

2.21

Dup 5285

Except 5 Rings

4.47

Stock 2400-burs ground. 4 rings-
Spiral full turn

3½ lb lot Ni fl
Not H 0001 Reg
pack 24. Reg gross
Thus 20 [illegible] in
4 rings.

4.50

		50	
5288	908	855	800
5289	912	875	830
5290	937	855	790
5291	922	860	825
5292	908	881	842
5293	925	870	840
5294	955	920	927
5295	952	926	957
5296	950	810	730
5297	957	917	922
5298	933	921	945
5299	940	935	957
5300	905	896	897
5301	920	896	930
5302	938	932	967
5303	960	948	992
5304	895	886	915
5305	930	937	967
5306	927	930	950
5307	932	915	930
5308	932	948	977
5309	955	940	970
5310	956	942	970
5311	977	956	975

Dissolved out by KCy

				% flake
Wt flake	5288	1.030	Wt of Mix 5.774	17.8 %
"	5289	1.146	5.950	19.2
	5290	1.322	6.164	21.4
	5291	1.214	6.009	20.2
	5292	1.254	5.926	21.1
	5293	1.273	6.042	21.6

Should have been 30% flake — 20.2

Investigate this —

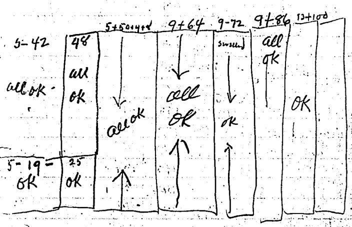
Tested	Weight orig	Wt mix washed + removed	wt flake after KCy	
5280	5586	5.488	0.840	85+15
5274	5437	5.870	0.538	91+9
5287	5715	5.617	1.004	81+19
5296	6418	6.282	1.524	75+25

This shows horribly irregular feed without agitator in flake hopper

5321 to 5326 after 5 cold 16 hot runs 6½ runs OK no sign troubles –

✱ gives lower on reading on hot test than most tubes –

		Cold	50	100	
Dupaf 5303	5312	992	956	962	
	5313	987	940	957	
Except 26X30	5314	985	953	982	
Spiral one	5315	990	943	970	
Complete turn	5316	957	942	955	
4 Rings	5317	977	950	962	
	5318	985	947	950	
4.51 ▨	5319	1007	947	962	
	5320	981	941	965	
~~21 Hole block 005~~	5321	970	845	765	
Ni flake not H – 4.11 ~~10~~ gms KCP ▨	5322	975	958	930	✱
10 flake, 24 Ring grain	5323	966	937	917	
Dup 5321 4.27	5324	971	958	915	
Except punched hole	5325	937	885	865	
block 10 gms KCP ▨	5326	965	931	917	
Punched hole block Spiral tube one whole turn	5327	985	967	990	
Reg Ni fl 0001 not H ▨	5328	1035	1000	1012	
24 Ring g repack 4.57 10 gr KCP	5329	992	960	977	
Punched hole block	5329½	937	900	940	
005 – spiral one turn Reg Ni flake 0001 – not H.	5330	925	922	960	
10 fl 24 g 129 pack 21% ▨	5331	940	935	972	
	5332	958	942	972	
4.57	5333	935	925	962	
	5334	903	890	932	



See last page	5335	952	870	842	
	5336	933	927	950	
	5337	972	967	987	
Dup 5329½ ▨ Except from 33% KOH	5338				
	5339				
	5340				
Dup 5329½ Except Ni flake is cut strips 60/1000 wide thro ___ mill Mille 4.47 ▨	5341	927	837		
	5342	967	932		
	5343	1012	972		
Same as 5341 Except 21 Hole stick Spiral — 4.41 2.33 ▨	5344	1035	995		
	5345	1023	925		
	5346	1033	945		
21 Hole stock 005 SPIRAL one Complete turn 3½ 10 nif 24 gr 0001 not H — Reg pack 24 grams 21% 4.44 2.23 ▨	5347	956	938	977	
	5348	990	902	945	
	5349	997	970	1000	
	5350	1006	955	957	
	5351	985	942	960	
	5352	995	942	940	
	5353	987	938	922	12th day put in 2 grams Li OH
	5354	985	932	923	
	5355	1000	920	925	
21 Hole 005 10 nif 0001 - not H, 3½ lbo Reg pk 24 grams Rem 33% KOH 5 Rings 4.26 2.61	5356	1090	782	637	
	5357	1125	833	672	
	5358	1122	802	645	

Emptied out 33 put in 21% soaked 24 hours — then put in 21% [illegible] 2 grams Li OH Each cell —

Run 31% KOH	2:52	4:25	5359	1085	887	762
			5360	1083	783	635
			5361	1050	785	692
29%	2:34	4:30	5362	1030	775	632
			5363	1032	477	382
			5364	967	768	725
27%	2:34	4:31	5365	1006	868	865
			5366	1012	875	800
			5367	1010	906	862
25%	2:31	4:34	5368	995	908	890
			5369	1017	938	912
			5370	997	910	850
23%	2:23	4:32	5371	945	907	885
			5372	996	922	892
			5373	947	900	895
21%	2:20	4:38	5374	975	940	927
			5375	948	920	915
			5376	970	880	812
19%	2:16	4:29	5377	935	931	932
			5378	940	946	937
			5379	912	921	921
17%	2:11	4:27	5380	897	925	922
			5381	912	931	927
			5382	897	928	910

15% KOH 2.02 4.24	5383	862	927	927
	5384	872	928	925
	5385	845	900	850
13% 2.03 4.23	5386	855	900	897
	5387	865	915	918
	5388	762	925	802
11% 1.97 4.30	5389	790	877	850
	5390	835	912	900
	5391	825	892	860
9% 1.77 4.21	5392	757	817	780
	5393	765	833	825
	5394	720	795	787
7% 1.69 4.21	5395	700	748	632
	5396	750	820	782
	5397	690	807	792
21 Hole 005 Ni f 0001 not H-Reg pack 10 ft 24 ga 3½ lb 21% 4 Rings Run 5 Years give to Holland 4.32	5398	977	947	Holland
	5399	957	925	
	5400	975	942	
Dup of 5398 except 21 hole Spiral 4 Rings after 5 Run go to Holland 2.24 4.42	5401	1006	977	
	5402	992	950	
	5403	980	945	
26830 005 Ni f 10 mil 24 ga not thru H-Reg pk 3½ 4 rings. after 5 Run go to Holland 2.24 4.26	5404	955	927	
	5405	958	945	
	5406	958	925	

5 rings in 31 mah better than 4 rings Cold –
5422 to 24 ok 5 cold, not Hot OK but ~~22~~25 to 27 one broke –

Dmp 5404 Except Spiral tube 5 Runs then to Holland 4.49	5407	990	955	
	5408	1013	975	
	5409	1031	987	
Punched Hole stock 005 Mf 10 0001 not H 24 gr 3½ lbs Reg pack 4 Rings. 5 runs then goes to Holland 4.43	5410	960	927	
	5411	946	927	
	5412	961	930	
Dmp 5410 Except Spiral tube 5 Runs then goes to Holland 4.51	5413	962	922	
	5414	995	957	
	5415	950	922	
2400 stock 005 10 m f - 0001 - not H, 24 gr Reg pk 4 rings. 5 Runs then Holland 4.28	5416	942	920	
	5417	962	925	
	5418	963	925	
Dmp 5416 4.46 Spiral tube 5 Runs goes Holland	5419	1001	972	
	5420	990	972	
	5421	990	957	
21 Hole 005 Spiral 10 m 24 gr Reg pk 4 Ring Top end not fastened 21% 10 Grms KCl – 4.11	5422	882	870	897
	5423	927	900	500
	5424	917	895	927
Dmp 5422 26 x 30 005 Spiral not fastened top. 10 gr KCl – Little spring 4.16	5425	945	972	942
	5426	1007	945	890
	5427	875	898	905
21 Hole 005 Mf 10 0001 24 gr reg pk 4.18 Spiral – 33% KOH	5428	1140	832	680
	5429	1110	835	700
	5430	1092	782	607

Holland

on 3rd Holland Dmp Effcy run 180 5407 89 worst No 5417-18-19 best, for effcy –

Note after Feb 5 all old & new Tubes, – go on 180
6½ hours chg at 200 & 5½ hours daily at
1 hrs given 2 runs daily KOH changed twice during
run & once at end of run —

5-26		5+46	9+50	9-56	9x70	9+98
OK	248	ok	All ok Except 5425 cts Bent 117 –	all ok Except 5425 cts Bent	OK Except 5425 bent & broken 5426 Seam opening	OK
OK	245	OK				
OK	248	OK				
breaking seam opening	115	135 broken seam opening				Bent + broke Seam opening
seam starting open slightly	218	210 smaller seam opening				
OK	250	OK				OK

of 33% cool tubes cold run
21 Hole 1114 — Punched 1033 — 26X30 1137 — 30X34 1015

			50	100
Dup 5428 Except Punched block Spiral 4:20 33% KOH	5431	915	640	505
	5432	1095	800	647
	5433	1090	840	575
Dup 5428 Except 26 X 30 005 Spiral 4:20 33% KOH.	5434	1127	800	600
	5435	1145	750	550
	5436	1145	800	582
Dup 5428 Except 30X34 005 Spiral 4:01 33% KOH.	5437	870	890	492
	5438	1080	700	555
	5439	1095	833	632
21 Hole 0 035 burr ground, dont nick 10 M .0001 24 g req 4 ramp Spiral tube 21% KOH 2:06 4:64	5440	970	955	975
	5441	972	942	980
	5442	930	892	920
RA 707 - Spiral 21 Hole 005 Not washed not filtered dried Low heat. Req- 2:12 5.10.	5443	1091	980	940
	5444	1060	1012	980
	5445	1092	987	942
Dup 5443 26X30 005 SPIRAL 2:17 5.12	5446	1117	972	920
	5447	1100	987	940
	5448	1112	970	842
RA 707 - Half wash - filtered Dried high heat. 26X30 .005 SPIRAL. Req 2:11 5.56	5449	1163	1135	1070
	5450	1175	1155	1135
	5451	1177	1155	1100
Dup 5449 21 Hole 005 Spiral 2:13 5.56	5452	1167	1185	1175
	5453	1200	1200	1170
	5454	1185	1172	1135

							aft. KCy milg flake
Original cut mix	8033 -	before KCy	7929	loss	103 milg		1.972 1.782
"	7924	"	7829	"	97		
"	7911	"	7859	"	52		1.943

5449 - flake 25%
5450 23%
5451 25%

This Tube mixed Swell + got out Catlott see 5455

			50	
RA 707 ½ wash not filtered Dried low heat	5455	1155	1107	1075
21 hole 005 Spiral.	5456	1157	1060	1025
Req 2.31 5.04.	5457	1180	1120	1117
Dup 5455	5458	1186	1042 x	982
26 X 30 005 spiral	5459	1202	1022 x	910
2.26 5.11	5460	1190	1030 x	942
RA 707 - ½ wash filtered, Dried High heat	5461	1092	922	875
21 Hole 005 SPIRAL	5462	1095	915	865
Req 2.13 5.19	5463	1125	910	790
Dup 5461 -	5464	1132	925 x	842
26 X 30 005 Spiral	5465	1140	897 x	822
Req 2.20 5.10	5466	1092	892 x	835
RA 707 - Reg wash filtered, Dried low heat	5467	952	937	972
Spiral 21 Hole 005	5468	971	960	985
Req 2.16 4.46	5469	971	957	972
Dup 5467	5470	950	945	967
26 X 30 005 Spiral	5471	967	947	970
2.20 4.41	5472	1002	962	970
RA 707 - Reg number of washes - not filtered	5473	982	967	982
Dried High heat 21 Hole	5474	997	985	997
005 Spiral 4.37 Req 2.26	5475	1008	985	997
Dup 5473 4.	5476	1022	995	1007
26 X 30 005 Spiral	5477	995	967	980
2.26 4.43	5478	1010	922	942

Co

[illegible]

flake -

5459 ~~orig wt~~ orig 7.37 by Key lot fl 1.486 80 x 20.
5460 orig lot 7.37 by Key lot fl 1.539 80 x 20
5461 - original lot 7.472 by Key fund lot flake 1.616 - 21% flake

1.525 flake Orig wt 7.408 23% flake

1.421 flake 7.300 orig wt 19% ~~flake~~ Investigate 5455 is ok

1.580 flake = 21% fl orig wt 7.365. with 21 005 Spiral -

all ni flake

		Cold	50	
RA707 Reg number of Washed, filtered, Dried High heat. 21 Hole 005 Spiral, Reg 2.17 4.40	5479	947	935	970
	5480	965	947	975
	5481	960	947	980
Dup 5479 26 X 30 005 Spiral 2.17 4.47	5482	987	942	970
	5483	970	935	945
	5484	957	922	955
RA707 Reg number Washed Not filtered Dried low heat. 21 Hole 005 Spiral Reg 2.14 4.28	5485	900	895	922
	5486	945	935	967
	5487	931	917	947
Dup 5485 26 X 30 005 Spiral 2.16 4.48	5488	962	922	965
	5489	968	887	912
	5490	972	857	862
put about oz green under bell jar sponge several hours pack 21 Hole 005 Spiral 2.10 4.16	5491	972		932
	5492	987		XX 947
	5493	1000		957
Dup 5491 - Except green on hot plate 3 hours - 2.1 4.16	5494	865	822	842
	5495	893	837X	855
	5496	882	793	852
RA707 No wash, not filtered dried high heat, 21 Hole 005 Spiral Reg feed bad 5.32 1.84	5497	1000	832	700
	5498	982	792	690
	5499	967	822	690
Dup 5497 26 X 30 005 Spiral feed bad 5.42 1.9	5500	1025	875	787
	5501	1030	720	607
	5502	1026	817	740

1.516 flake 6.359 orig wt 23.8% flake -

The difference between these 2 5491 group & 5494 - wasn't in the green the tube, the distribution but must be due to friction in packing & breaking up moist green ~~spreads~~ makes better or greater area of contact,

There wasn't much dif per grammes but wet green got more in Tube - a that about all the difference -

5512 is good Testing
why low Cap on hot tube

		Cold	50	
Dup 5497 Except 21 hole 0035 Spiral - 1.87 [illegible] 5.51	5503	980	792	675
	5504	980	822	687
	5505	1050	765	755
Dup 5497 Except 26x30 0035 Spiral - 1.93 [illegible] 5.56	5506	1072	920	855
	5507	1085	920	865
	5508	1070	950	877
RA 707 - No wash dried low heat, filtered 21 Hole 005 Spiral Reg 2.20 5.49	5509	1196	1130	1095
	5510	1212	1177	1172
	5511	1215	1117	1092
Dup 5509 21 Hole 0035 spiral - 2.16 5.61	5512	1243*	1175	1172
	5513	1245	1170	1160
	5514	1150	1170	1197
Dup 5509 26x30 0035 spiral - 2.2 5.61	5515	1230	1192	1172
	5516	1230	1180	1175
	5517	1238	1190	1162
Dup 5509 26x30 - 005 spiral 2.17 5.48	5518	1207	1097	1047
	5519	1192	1077	1025
	5520	1175	1075	1032
RA 707 not washed filtered - dried high heat 21 Hole 005 Reg 2.00 5.84	5521	1187	920	727
	5522	1166	1135	1095
	5523	1137	1015	927
Dup 5521 21 Hole 0035 spiral Reg 1.91 5.95	5524	1150	1067	1032
	5525	1127	1000	957
	5526	1150	1030	995

						after KCl flake	
original wt	8041	before KCl	8.139	gain	98 mlg	2.2160	28%
"	7977	"	8.071	"	94 "	2.0726	25.8%
"	8.041	"	8.139	"	98 "	2.0655	25.2

Crossed on wet asbestos

			*		
Dup 5521 26X30 005 Spiral- 5.77 1.9	5527	1095	872	822	
	5528	1112	922	870	
	5529	1082	872	760	
RA707 ½ wash filtered dried low heat 21 Hole 005 Spiral Reg 2.22 5.24	5530	1183	1165	1150	
	5531	1157	1150	1137	
	5532	1165	1137	1127	
Dup 5530 21 Hole 0035 spiral 2.26 5.35	5533	1217	1177	1155	
	5534	1207	1182	1157	
	5535	1210	1220	1180	
Deep 5530 26X30 005 spiral 2.14 5.27	5536	1145	1115	1075	
	5537	1137	1095	1097	
	5538	1177	1050	1100	
Dup 5530 26X30 0035 Spiral- 5.29 2.31	5539	1207	1207	1132	
	5540	1233	1205	1147	
	5541	1232	1215	1185	
Deep 5530 30X34 005 spiral 2.34 5.14	5542	1207	1177	1140	
	5543	1195	1185	1167	
	5544	1212	1035	930	
21 Hole 0035 spiral- Reg - Run 93% KOH 4.73	5545	1166	777	680	
	5546	1187	847	700	
	5547	1203	875	730	
Deep 5545 4.69 26X30 0035 Spiral Run 33% KOH	5548	1158	757 x	682	
	5549	1257	892 x	812	
	5550	1218	877 x	742	
X Mch 21 bent a little like $		all bending a little			

all Spiral

		Cold	60	100	
Dup 5449 Except 33% KOH. 5.80	5551	1000	665	580	
	5552	1032	777	630	
	5553	1032	807	600	
Dup 5452 Run in 33% KOH 5.85	5554	1023	750	612	
	5555	1015	805	630	
	5556	950	760	562	
21 Hole 0035 spiral Regpk 10 m fromi green 24 Run in 10 gram KCl each cell 4.69	5557	1042	970	982	
	5558	1060	997	1007	
	5559	1070	982	962	
26×30 0035 Spiral Regpk 10 ni f 0001 ~~10~~ gr KCl- 4.70	5560	1041	995	995	
	5561	1037	992	1007	
	5562	1057	992	985	
21 Hole 005 SPIRAL Regpk 5 Rings 4.61 ~~Run~~ in 33% KOH.	5563	1176	790	650	
	5564	1122	685	535	
	5565	1206	750	650	
Dup 5563 Except 21 Hole 0035 Run 33% 5 Rings 4.61	5566	1218	840	712	
	5567	772 S	S 515	417	
	5568	1188	915	745	bent
26×30 Spiral 0035 Regpk 10 m 24 green 4.71 5 Rings Run 33% KOH.	5569	1217	845	700	
	5570	1200	865*	707	
	5571	1175	862	682	
Dup 5569 spiral Except 26×30 005 4.64 5 Rings 83% KOH.	5572	1130	722	565	
	5573	1135	772	627	
	5574	1137	385	510	

	5×22	5×36	7×50	9×72
210	ok	OK	all ok	ok
245	ok	OK		
175	bent	bent		
215	ok	OK		
195	OK	OK		
255	bent.	OK		

All Spiral

March 28 07

split + breaking

Bending

bad heat

RA707 – ½ wash 5.83 filtered – dried high heat 21 Hole 005 Spiral 5 Rings Reg pk 33% Same as used 5449	5575	1027	850	645
	5576	992	920	670
	5577	1018	842	662
Dup 5575 21 Hole 0035 – 5 Rings Reg pk 33% 5.96 5449	5578	1070	690*	540
	5579	1085	880×	675
	5580	1110	867×	725
RA707 Same as used in 5449 – 26X30 0035 5 Rings – Spiral Reg pk 5.93 33% Roll.	5581	1110	787	665
	5581½	1110	847×	662
	5582	1080	847×	680
Dup 5581 Except 26x30 005 – spiral 5 Rings 5.92 33%	5583	942	645	450
	5584	862	520	150
	~~5585~~			
RA707 Same as used 5443 No wash not filt dried Low heat, To Holland Then 50 Hot Then Holland 26X30 005 spiral 4 rings 2.11 21% Reg 5.26	5586	1111	890	
	5587	1111	955	
	5588	1110	937	
Dup 5586 Except 21 Hole 005 spiral goes to Holland then 50 hot 2.00 21% 4 rings 5.17	5589	1022	842	
	5590	1030	862	
	5591	1035	892	
RA707 Same as used in 5449 – ½ wash filtered dried high heat 26X30 005 Reg pk 4 rings Holland then 50 Hot then H again 21 Reg	5592			
	5593	No Ni OH left		
	5594	8		
Dup 5592 Except 21 Hole 005 spiral Holland then 50 then H – 21 Reg	5595			
	5596	No Ni left		
	5597			

Holland

~~and~~ Take these cells pour out liquid & have 3 new Ni Tubes put in & Run in 33% again to see if 33% hasn't removed something bad.

all spiral

RA707 1/2 wash not filtered dried low heat same as 5455 26X30 005 spiral - 4 Rings Reg pk Holland then 50 then H - 21 Reg 2.18 5.37	5598	1181	1080
	5599	1185	1075
	5600	1155	900
Dup 5598 21 Hole 005 4 rings Holland + 50 [illegible] Heat 21 Reg 2.16 spiral 5,43	5601	1175	9.
	5602	1182	
	5603	1166	
RA707 1/2 wash not filtered dried High heat. 26X30 005 4 rings spiral - reg pack - Holland + 50 Kraft H. 21% 2.03 5.24	5604	1052	842
	5605	1082	867
	000	—	
Dup 5604 Except 21 Hole 005 spiral Holland etc 5.09	5606½	955	825
	000	X	
	000		
RA707 Reg wash filtered dried low heat used in 5467 26X30 005 Reg pk Spiral 4 Rings - Holland Elc 4.71	5609	985	967
	5610	965	950
	5611	972	922
Dup 5609 Except 21 Hole 005 Holland Elc 4.66	5612	968	
	5613	942	
	5614	975	
RA707 Reg Wunder Washer not filtered dried high heat used in 5473 - 26X30 005 spiral Reg pk Holland Elc 4.60	5615	987	
	5616	986	
	5617	1008	
RA707 Same as used in 5479 - 26X30 005 spiral Holland Elc 4.61	5618	935	
	5629	930	
	5620	927	

Holland

all Spiral tube

		Cold	50	
RA707 same as used in 5485 26X30 005 spiral - Holland Elc 4.63	5621 5622 5623	910 928 892		Holland
RA707 same as used in 5497 26X30 005 Holland Elc 5.59 50 Hot	5624 5625 5626	977 977 1011		
21 Hole 005 1½ Spiral 4 rings Nif 10 0001 not H. Reg pk 24 g - Flake 62 21% 4.68 2.11	5627 5628 5629	992 1000 975	830 860 812	
21 Hole 005 1½ Spiral 5 Rings - 10 Nif 0001 - Flake 62 Reg pk. - 21% 4.67 2.13	5630 5631 5632	950 1015 1016	845 865 897	
Dup 5630 Except 21 Hole 0035 — 4 Rings Flake 62 21% 4.78 2.09	5633 5634 5635	990 1011 982	917 930 897	
21 Hole 005 1½ Spiral Reg pk 5 Rings 10 Nif 24 g - Run 33% flake 63 4.66	5636 5637 5638	1150 1142 1145	740 757 740	
Dup 5636 1½ Spiral 4 Rings Run 21% 10 gm KCl flake 63 4.70	5639 5640 5641	1020 975 922	982 927 800	
21 Hole 005 1½ spiral 20 Niflake 48 Reg 9150 4 Rings 2.09 4.49	5642 5643 5644	935 943 942	880 870 880	

* This gives higher runs running hot than others

21 Hole 005 1½ spiral 30 ni flake 72 Reg g 4 rings 2.19 4.00	5645 5646 5647	882 866 885	800 795 795
21 Hole 005 1½ spiral 40 nickel 96 Reg green 4 rings 2.22 3.89	5648 5649 5650	862 870 863	797 780 820
21 Hole 005 1½ spiral Hard Rubber shavings 4 Rings 3½ wt- 2.09 4.60	5651 * 5652 5653	950 962 980	910 962 987
Dup of 5651 Except 100 milg flour of Sulphur 2.10 4.70	5654 5655 5656	991 983 996	957 942 930
21 Hole 005 1½ spiral 10 ni 24 green 4 rings 4 lb wt 2.07 4.84	5657 5658 5659	1020 1005 988	980 952 952
Dup of 5657 2.1 4½ lb wt 4.95	5660 5661 5662	1047 1050 1043	1000 985 1010
Dup 5657 5.01 2.11 5 lb wt	5663 5664 5665	1057 1048 1056	1007 995 1000
21 Hole 005 1½ spiral 20 ni f 48 green Reg 2.1 4 lbs 4.39	5666 5667 5668	982 877 968	875 810 895

Dup 5666 4.69	5669	991	940
$4\frac{1}{2}$ weight	5670	987	912
2.13	5671	1021	945
Dup 5666	5672	995	915
5 lb wt	5673	1027	912
2.19 4.64	5674	1030	927
21 Hole 005 $1\frac{1}{2}$ Spiral	5675	890	770
30 Ni flake 72 Reg green	5676	938	820
4 Rings 4 lb wt 2.27 4.05	5677	933	833
Dup 5675	5678	932	845
Except, $4\frac{1}{2}$ lb wt	5679	932	867
2.25 4.13	5680	922	850
Dup 5675	5681	980	880
5 lb wt 4.22	5682	975	892
2.31	5683	977	875
21 Hole 005 $1\frac{1}{2}$ Spiral	5684	877	797
4 Rings 40 flake Ni 4 lbs	5685	910	800
96 Reg green 2.23 3.96	5686	867	782
Dup 5684	5687	922	845
2.28 $4\frac{1}{2}$ lbs 4.05	5688	900	797
	5689	920	822
Dup 5684	5690	947	857
2.26 5 lbs 4.13	5691	927	812
	5692	937	855

21 Hole 005 1½ spiral 20 ni flake same as used = RA707 5455 = ½ wash not filled dried low heat 2.23 4 lbs 5.22	5693	1153	1032
	5694	1155	1000
	5695	1187	980
Dup 5693 5.31 2.26 4½ lbs	5696	1207	1012
	5697	1197	1035
	5698	1195	1032
Dup 5693 5.35 2.22 5 lbs	5699	1177	970
	5700	1191	892
	5701	1205	967
	5702		
21 Hole 005 1½ spiral 4 rings 10 ni f 24 Reg g Single Tamps feeds every Tamp 2.29 4.32	5703	1000	932
	5704	980	920
	5705	990	920
Dup of 5703 Single Tamps 20 ni flake 48 Reg green 4 lb wt — 2.07 1 min 45 sec 4.03	5706	830	765
	5707	850	770
	5708	832	775
Dup 5703 Single Tamp 40 f 96 Reg g 5 lb wt. Loaded 1 min 2.1 3.73	5709	785	750
	5710	757	717
	5711	807	740
21 Hole 005 1½ spiral - 10 ni fl - 24 Reg g - 4 rings run in 33% with 100 mly S spheres 4.71	5712		750
	5713		800
	5714		747
21 Hole 005 1½ spiral 10 ni f 24 Reg g 21% 200 mly flour sulfur 4.63	5715		930
	5715½		907
	5716		937

5725

Long 4" Intr. 1½ spiral 21 Hole 005 6 rings Reg green flake 68 part up with 4 [illegible] - 24 green 10 flake not spring made 6.7 8 flake medium 190 7.12	5717	1344
	5718	1356
	5719	1325
	5720	1384
	5721	1372
	5722	1356
	5723	1336
Dup of 5717 Except green No wash filled dried low heat RA 709 - 7.80 not spring 68 flake 10 or 24 1.81	5724	1483
	5725	1447
	5726	1390
	5727	1380
	5728	1373
	5729	1400
	5730	1443
Dup 5717 Except ½ wash not filled dried low heat 1.91 68 flake 7.71 -	5731	1510
	5732	1443
	5733	1460
	5734	1447
	5735	1390
	5736	1437
	5737	1443

Last Nos in Walter Book
5737 —

				old Iron with new Ni	Old Ni with new Iron
21 Hole .005" 1½ spiral 3½ cbcot 10 ni f 24 Reg green 4 ramp 33% KOH 100 milg Flour Sulphur 4.87	5775	1220	777	1280	642
	5776	1095	727	1280	622
	5777	1145	727	1290	620
Dup 5775 33% & 250 milg Flour Sulphur 4.80	5778	1107	460	1080	710
	5779	1110	700	1160	755
	5780	1095	727	1335	775
Dup 5775 33% & 500 milg Flour Sulphur 4.83	5781	95 650	0	1210	815
	5782	500 710	0	900	830
	5783	400 637	725	1140	880
Dup 5775 33% & 500 milg Cinnabar 4.88	5784	1142	740	980	697
	5785	1177	900	1275	825
	5786	1172	870	790	692
Dup 5775 33% & 500 milg Metallic Arsenic 4.90	5787	1172	872	1275	680
	5788	1145	870	1250	710
	5789	1205	937	1300	792
Dup 5775 33% & 500 milg Solid Brimstone 4.97	5790	0 542	725	1275	845
	5791	180 537	780	1200	820
	5792	0.0	722	900	837
Dup 5775 33% & 500 milg HgO — 5.04	5793	1597	790	1355	670
	5794	1135	697	1340	665
	5795	1200	767	1215	647
Dup 5775 33% 500 milg Sulphide Calcium 4.96	5796	1150	617	770	717
	5797	1167	635	895	750
	5798	1112	597	1255	712

Co

Iron put up with Nickels
+ Nickels put up with 74
+ Recd 4 cells [illegible]

Co

21% — after [illegible] cells

get Results

(Old)

Ni reversed against strip & short ckt'd — ~~[illegible]~~ chgd reversed a [illegible] short ckted 12 times —

33% KOH

Original Run in —

These Runs in 21% KOH —

• 5817 went 1112 on 2nd run?

Dont seem hurt it much if any –

Dup 5775 33% of 500 mlg Sulphide Antimony 4.88	5799	772 930		Co		
	5800	850 1000				
	5801	750 900				
Dup 5775 33% of 500 mlg Selenium – 4.68	5802	1150	837	317	Co	
	5803	1137	900	335		
	5804	1142	997	340		
green Gram soaked in Hot 33% for 1 month & then washed dried & made in tube 21 Hole 1½ spiral – 4.34	5805	1017		850		
	5806	1026		897		
	5807	1007		850		
33% with 40 grms Reag green put on Hot test 1 a month till I return	5808	Put on rack 8				
	5809					250 R
21 Hole 005" 1½ spiral tubes previously soaked 30 days Hot 33% then run in 21% 4.71	5810	917 x	890	813	767	837
	5811	937	887	793	723	750
	5812	892	872	799	767	797
21 Hole 005 1½ spiral 3½ wt ½ wash not filtered, dried low heat 4 Rings 10 m flake 24 green Run in 27% NaOH 2 grams LiOH	5813	1067	687			
	5814	1042	650			
	5815	1085	650			
Dup Run in 25 NaOH + 2 grms Lithium Hydrox Each Cell 5.29	5816	1120	870			
	5817	850*	845			
	5818	1000	825			
Dup 23% NaOH 2 grms LiOH, 2.15 5.15	5819	1297	1042			
	5820	1275	1000			
	5821	1287	1042			

300
830
740
740

Old Fe new Ni	Old Ni new Fe
1390	825
1345	800
1390	795

* 5822 average Voltage 1.197
50H Days = doubtful?

Dup 21% NaOH.	5822	1290*	1272		
2 grms LiOH.	5823	1305	1272		3)3791 1264
flake 67 2.51 5.13	5824	1277	1247		
Dup 19% NaOH	5825	1270	1300		
2 grms Lithium OH	5826	1252	1310		
flake 67 2.50 5.07	5827	1280	1310		3)3920 1306
Dep 17% NaOH	5828	1272	1247		
2 grms LiOH	5829	1282	1247		
2.44 5.12	5830	1247	1270		3)3764 1255
Dup 15% NaOH,	5831	1185	1192		
2 grms LiOH.	5832	1227	1292		3)3731 1244
2.40 5.05	5833	1217	1247		
Dup 13% NaOH	5834	1217	1190		
2 grms LiOH, 5.15	5835	1227	1190		3)3570 1190
2.37	5836	1215	1190		
Dup 11% NaOH,	5837	1172	1130		
2 grms LiOH,	5838	1200	1112		3)3369 1123
2.32 5.14	5839	1207	1127		
Dup 9% NaOH,	5840	1187	1115		
2 grms LiOH,	5841	1185	1087		3)3317 1106
2.31 5.11	5842	1180	1115		
~~Dup [illegible] NaOH~~	~~5843~~				
~~2 [illegible]~~ Out	~~5844~~				
	~~[illegible]~~				

			50		
21 Hole 005 1½ spiral 4 rings 3½ wet 10 m 24 green ½ couch not filtered Dried low heat. 2.60 Run in 27% KOH 2 grms LiOH, 5.18	5846	1337	1375		
	5847	1337	1345		
	5848	1377	1365		
Dup 25% KOH, 2 grms LiOH – 2.53 5.20	5849	1307	1302		
	5850	1320	1325		
	5851	1320	1322		
Dup 23% KOH, 2 grms LiOH. 2.37 5.23	5852	1260	1297		
	5853	1227	1252		
	5854	1232	1275		
Dup 21% KOH, 2 grms LiOH, 2.26 5.22	5855	1192	1232		3)3664 1221
	5856	1187	1212		
	5857	1192	1220		
Dup 19% KOH, 2 grms LiOH, 2.24 5.24	5858	1170	1210		3)3637 1212
	5859	1180	1180		
	5860	1180	1247		
Dup 17% KOH, 2 grms LiOH, 2.24 5.15	5861	1167	1187		3)3549 1183
	5862	1157	1187		
	5863	1150	1175		
Dup 15% KOH, 2 grms LiOH, 2.22 5.18	5864	1142	1127		3)3416 1139
	5865	1160	1147		
	5866	1157	1142		
Dup 13% KOH 2 grms LiOH. 5.29 2.22	5867	1180	1182		3)3482 1161
	5868	1162	1150		
	5869	1180	1150		

3)524
175

3)3949
1316

3)3824
1275

3)3664
1221

3)3482
1161

3)3637
1212

3)3416
1139

3)3549
1183

flake(67) used this group

Holland 5876 etc changed from 2.7c to 4.7c after 1st run

Dup 11% KOH	5870	1140	1135	
2 grm LiOH –	5871	1180	1112	3)3387 1129
2.21 5.23	5872	1157	1140	
Dup 9% KOH,	5873	1097	1125	
2 grm LiOH –	5874	1120	1100	3)3325 1108
2.11 5.29	5875	1130	1100	
Dup 5846 – 27% NaOH.	5876	1080		
for Holland	5877	1125		
2.07 5.34	5878	1117		
25 NaOH	5879	1165		
Holland	5880	1167		
5.26	5881	1180		
23% NaOH	5882	1130		
Holland	5883	1180		
5.33	5884	1182		
21% NaOH	5885	1082		
	5886	1122		
Holland 5.38	5887	1120		
19% NaOH	5888	1162		
	5889	1150		
Holland 5.40	5890	1150		
	5891	1135		
17% NaOH	5892	1185		
5.33 Holland	5893	1167		

3)3387 1129

		Cold	50
15% NaOH	5894	1170	
Holland	5895	1212	
5.39	5896	1155	
13% NaOH	5897	1170	
5.33	5898	1175	
Holland	5899	1187	
21 Hole 005 1½ spiral 3½ lb cot 4 rings -	5900		
21% - 10 Ni fl 24 Reg green	5901		
2 grms Formate K each cell.	5902		
Dup 5900	5903		
Except	5904		
2 grms Hypophosphite Potash each cell.	5905		
21 Hole 005 1½ spiral 3½ lb cot 4 rings — 11 Ni 24 Reg	5906	1075	780
Before running on board	5907	1075	937
Reverse the tube against Counter 3 hours at 200 then run reg — 4.68	5908	1067	940
21 Hole 005 1½ spiral, 4 rings 3½ wt - ½ wash not filled	5909	1150	1020
Dried low heat	5910	1182	1065
10 Cobalt f 24 green 5.40 2.17 Run Reg	5911	1180	1070
21 Hole 005 1½ spiral -	5912	1235	1155
3½ lb wt + 4 rings 5.01	5913	1215	1125
5 Ni flake ½ thickness 2.43 24 green ½ wash no filler dried low heat	5914	1245	1162
Dup 5912 5.09	5915	1230	
but 4 lb cut	5916	1250	
2.45	5917	1267	

So far best cell will be
21 Hole 005 - 4 lb wt for long tubes
6 rings Tight flake ½ thick 5 flake probably little
Crumpled - 24 green ½ w not f low heat
thru 20 - better feed, 15% NaOH 2 or less +
2% LiOH, ought get 2.75 mil amp hours
per gram green and 7,800 grms
long tube, or 2,145 mil amp on long
charge -

Ft Myers Fla April 13 1907

2759
2465

Cant do above yet

Ft Myers Mch 20 1908

Looks as if ½ thickness flake
bent around the particles + make better
Contact 1/4 thickness 1/4 weight
ought to be better —
½ flake 100 runs dont lose Capacity

1910

Dep 5915 Except 4 ½ lb cot 2.36 5.18	5918	1255	
	5919	1217	
	5920	1232	
Dep 5915 Except 5 lb cot 2.37 5.21	5921	1247	
	5922	1257	
	5923	1202	
21 Hole .005 1 ½ spiral 10 Ni flake 24 ½ wash not filtered dried low heat 4 Rings 3 ½ lbs 5.26 10 grms KCl each cell.	5924	1192	1025
	5925	1230	1085
	5926	1232	1035
Dep 4 lbs cot KCl 5.36	5927	1205	1085
	5928	1215	1060
	5929	1190	1125
21 Hole .005 1 ½ spiral 3 ½ cot 4 rings - 10 Ni 24 Reg 7 - after 5 [illegible] hot heat reverse all the time - 4.61	5930	1145	
	5931	1170	
	5932	1142	
21 Hole .005 1 ½ 3 ½ 4 rings Reg 24 7 - flake 66 Nickel strip changed reverse all the time for 50 hours. 4.55	5933	0	
	5934	2	
	5935	1	
Dep 5933 - but assembled with 3457 3458 [illegible] after Holland [illegible] with them - Reversed continuously [illegible] 50 Hot [illegible] 4.65	5936	1100	
Dep 5933 - but assembled with [illegible] No. 3475 3476 - when Holland goes through with them 4.65 Run reverse continuously	5937	1140	912

5921 group charged cold + put on hot heat no current for various hours

original	Hours	½ V	1 Volt
1214	24	1072	1022
	48	1037	617
	72	961	311
	96	908	203

5910 OK
5924 OK

Chg 6 ½ h cold
disch Hot 180 ma

	½ V	1 V
5909	786	741
10	789	756
11	810	777
12	999	993
13	987	975
14	984	972

Chgd 6 ½ h Hot
dis cold 150 ma

	½ V	1 V
5909	495	452
10	512	475
11	522	487
12	642	632
13	647	630
14	636	625

Cobalt flake

Ni flake

This shows chg hot is bad + Co flake
is much worse than Ni flake,
both groups same except flake
Co flake group has most green
Why does flake make dif -
pbly flake attacked + [illegible] in case Co -

21 Hole 005 1 $\frac{1}{2}$ spiral 3 $\frac{1}{2}$ Lbs 4 rungs Reg green 21% Carbowax 250 mil glycerine 4.49	5938 5939 5940	1117 1135 1120	962 977 645
21 Hole 005 1 $\frac{1}{2}$ spiral 3 $\frac{1}{2}$ 4 rungs - Run on barn 5 times then reverse continuously 50 Hz w/ 19% KOH flake 68 4.6	5941 5942 5943	1097 1110 1120	
Dup 5941 Except use 17% KOH	5944 5945 5946	1065 1072 1090	
Dup 5941 Except use 15% KOH. 4.60	5947 5948 5949	1067 1065 1050	
Dup 5941 4.64 Except use 17% NaOH 68 flake	5950 5951 5952	1120 1115 1092	
Dup 5941 Except 15% 68 flake NAOH 4.62	5953 5954 5955	1075 1050 1072	
Dup 5941 Except use 13% 68 flake NaOH, 4.61	5956 5957 5958	1012 1020 1022	
21 Hole 005 1 $\frac{1}{2}$ spiral 3 $\frac{1}{2}$ weight 4 rungs - flake cut 80/1000 wide ½ wash not felt dried Low heat - felt thru 15 mesh	5959 5960 5961		

			50	100
Dup of 5959 Except flake 100/1000 wide	5962			
	5963			
	5964			
Dup 5959 Except flake 120/1000 wide.	5965			
	5966			
	5967			
21 Hole 005, 1½ spiral 3½ wt 4 rings - ½ wash not fill low heat under bell jar with water 48 Hours 5.19 68 flake	5968		950	777
	5969		997	846
	5970		967	740
21 Hole 005 1½ spiral 3½ wt 4 Rings, 10 flake Cut 60/1000 wide ½ wash not filled low heat 24 2.29 4.93	5971	112.2		
	5972	1127		
	5973	1142		
Dup of 5971 Except the green through 60 mesh. 2.75 fines all in 5.09	5974	1155		
	5975	1130		
	5976	1157		
Dup 5971 5.14 Except green through 100 mesh - fines in Jall	5977	1100		
	5978	1132		
	5979	1107		
Ra 710. Mass action green 1½ spiral 005 4 ring 3½ 21 Hole 2.33 4.53	5980	1062		
	5981	1062		
	5982	1040		
21 Hole 005 1½, 3½ wt 4 Rings 75/100th Coat by rolling ½ thick Ni flake using KOH to wet.	5983	1152		
	5984			
	5985			

Ralph Ni mass action is No 710 - are of various kinds filled and not high & low heats

Hollands test on 5971-2-3

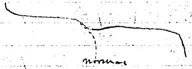
		14 hour chg 300 dis 150	1400 pm 5th run
5972	Charged 135° dis normal	775	1127
5971	" Normal dis 135°	1175	1122
5973	" & dis normal.	1120	1142

average dis voltage 5971 about .10 above 5972
" 5973 " .8 " "

chgd 14 h 300 dis 150
5973 when chgd & dis hot gave 1050.
5971 + 2 chgd & dis normal 1100

5971 chg hot 135° deg 5 hours 200 ma dis 150 discg normal 6.00
5972 Chgd normal dis hot " 8.25
5973 Chgd & dis normal. 7.85

A 5 gram Fe giving 1480 to V chg & dis normal
Chgd 15 h 400 dis 300.
Same now chgd & dis hot ~~at~~ 110° Fahr gave
2550 to Volt
The iron has a dip at where it falls off normal



There is certainly something here good for Electrolytic Thermo

21 Hole 005 3½ wt 4 ring 24 Reg graphite Mix	5986		652	433
7 Ni flake - 1½ spiral	5987		655	444
5.47 grm —	5988		622	443
21 Hole 005 - 1½ spiral 3½ wt 4 rings —	5989	1300		
½ wash not filled dried low heat 5.05	5990	1187		
Rings pushed on hard	5991	1150		
68 flake For Holland,				
21 Hole 005 1½ spiral 4 rings 3½ wt	5992	1162		
½ wash not filled dried low 4.98	5993	1157		
23 21% KOH 2 grm Caustic Lithia 2 each cell	5994	1145		
Dup 5992 Holland	5995	1125		
17% KOH 2 grms LiOH 224	5996	1120		
4.97 Each cell 68 flake	5997	1120		
Dup 5992 Holland	5998	1100		
13% KOH 223 68 flake	5999	1115		
4.96 2 grms LiOH Each cell	6000	1100		
Dup 5992 Holland	6001	1137		
Except 21% NaOH 5.08	6002	1110		
68 flake 2 grms LiOH Each	6003	1125		
Dup 5992 Holland	6004	1077		
68 flake 17% NaOH	6005	1162		
5.00 2 grms LiOH	6006	1175		
Dup 5992 Holland	6007	1135		
13% NaOH	6008	1150		
4.96 2 grms LiOH	6009	1135		

Nove Spring thru column

21 Hole .005 1½ spiral 3½ wt 4 rings ½ wash not filled dried low - green Thru 30 mesh 5.03 70 flake	6010 6011 6012	1145 1127 1137	
Dup 6010 green thru 40 mesh 70 flake 4.98	6013 6014 6015	1070 1112 1047	
Dup 6010 green thru 50 mesh 70 flake 5.06	6016 6017 6018	1135 1112 1142	
Dup 6010 green thru 60 70 f Cake 5.05	6019 6020 6021	1107 1112 1120	
Dup 6010 green thru 80 4 lb wt 70 flake 4.98	6022 6023 6024	1097 1095 1117	
Dup 6010 green thru 100 70 f Cake 4 lb wt 4.89	6025 6026 6027	1140 1140 1180	
Dup 6010 w green thru 180 5 lb wt	6028 6029 6030	wouldnt feed acted as of cake in the slide wouldnt drop out slide	
Dup 6010 with green thru 20 mesh 4 lb wt 70 flake 4.83	6031 6032 6033	1145 1177 1180	

[illegible]

			Cold	50
Repack Ni tubes 2 degummit 1 iron RA 871 self H 5% H2O 68 flake	A A	6010 6011	1130 [illegible]	1250
	A	6012	1230	1160
Dup of 6010	A	6013		
Dup 6010 Except RA No 871A Non pyro 5% H2O	A A	6014 6015	1140	1100
Dup of 6014	A A	6016 6017	1150	1290

[illegible]
got [illegible] 6010 1130
[illegible] 1140
[illegible] 1150

Dup 6010 green thrum 20 4½ cwt 70 flake 4.93	6034	1170
	6035	1202
	6036	1202
Dup 6010 green thrum 20 5 lb cwt 70 flake 5.0	6037	1185
	6038	1165
	6039	1215
Dup 6010 green thrum 40 4 lb cwt 70 flake 5.05	6040	1125
	6041	1127
	6042	1130
Dup 6010 Green thrum 40 5.12 70 flake 4½ lb cwt	6043	1177
	6044	1182
	6045	1167
Dup 6010 5.30 green thrum 40 70 flake 5 lb cwt	6046	1190
	6047	1175
	6048	1157
21 Hole 005 1½ spiral 3½ cwt 4 rings — Short [illegible] — 10 [illegible] 24 green ½ 2 [illegible] not [illegible] dried low heat 21% 2 grms Caesium hydrate	6049	1147
	6050	1177
	6051	1162
Dup 6049 — 4.84 21% 2 grms Rubidium hydrate	6052	1150
	6053	1142
	6054	1147
Dup 6049 4.85 21% 2 grms Beryllium Hydroxide —	6055	1100
	6056	1110
	6057	1125

Dont forget to Crimp
flake strips (ie) Corrugate
so bulk of flake will
be twice or 3 times as
great for same weight
So green will distribute
thru it + stop so much
layering — Fred all to
make it —

Dup of 6049 Except 21% 4.97 KOH saturated with LiOH —	6058	1110
	6059	1090
	6060	1200
Dup of 6049 5.16 15% NaOH Saturated with LiOH.	6061	1125
	6062	1180
	6063	1070
21 Hole .005 1½ spiral 3½ wt 4 x [illegible] — RA 710 one wash not filtered dried high heat Mass action 5.11	6064	1155
	6065	1110
	6066	1105
Dup of 6064. RA 710 one wash filtered dried high heat. Mass action 4.67	6067	1122
	6068	1112
	6069	1095
Dup 6064 RA 710 2 washes not filtered dried high heat, Mass action 4.51	6070	1082
	6071	1027
	6072	1085
Dup 6064 RA 710 2 washes filtered dried low heat, Mass action, 4.66	6073	1077
	6074	1092
	6075	1100
Dup 6064 RA 710 one wash not filtered dried low heat Mass action	6076	1125
	6077	1140
	6078	1135
Dup 6064 RA 710. ½ wash filtered dried low heat Mass action —	6079	1090
	6080	1090
	6081	1065

Dup 6064 Ra 710 No wash filtered dried high heat Mass action - 471	6082	900
	6083	920
	6084	900
Dup 6064 Ra 710 1/2 wash not filtered Dried low heat mass action 494	6085	1075
	6086	1082
	6087	1110
Dup 6064 Ra 710 One wash filtered dried low heat mass action 452	6088	1075
	6089	1090
	6090	1095
21 Hole 005 1½ spiral 3½ cut 4 rings – 1/2 wash not filtered dried low heat screened through 20 on 30 mesh fines out 486	6091	1127
	6092	1140
	6093	1147
Dup of 6091 Rings forced – screened through 15 mesh on 30 mesh, fines out, Rings forced on 485	6094	1137
	6095	1142
	6096	1152
21 Hole 005 1½ spiral 3½ cut 4 rings – flake 1/4 thick 2½ flake 24 green 1/2 wash not f low heat,	6097	
	6098	
	6099	
Dup 6097 4 lb cut,	6100	
	6101	
	6102	
21 Hole 005 1½ spiral 4 lb cut 4 Rings 1/2 w. not f low h 5 flake 1/2 thick 24 g 21% Kett 2 grms L.OH Rings forced on 481	6103	1122
	6104	1137
	6105	1115

Rings forced on, Dup 6103 4.81 15% NaOH 2 grms LiOH 4.81	6106 6107 6108	1237 1232 1200
Dup 6103 Rings forced on 15%s KOH, 2 grms LiOH 4.71	6109 6110 6111	1087 1022 1112
Dup 6103 Rings forced 10% NaOH 4.76 2 grms LiOH.	6112 6113 6114	1212 1247 1250
21 Hole .005 3½ 4 rings 1½ Spiral RA 710 Mass action ½ wash filtered dried high heat 5.75 1 of 24 gr	6115 6116 6117	1025 1027 1030
21 Hole .005 1½ spl 3½ 4 rings 1 of 24 g RA 710 ½ w. not fil dried high heat Mass action – 5.07	6118 6119 6120	995 992 990
21 Hole .005 1½ spl 3½ 4 Rg RA 710 mass action 2 washes not filtered) dried low heat 4.46	6121 6122 6123	1072 1075 1115
Dup 6121 RA 710 Mass action no wash not filtered, dried low heat 70 flam 5.04	6124 6125 6126	975 965 955
Long tube – 21 Hole .005 1½ spiral rings big mac 31 gr 10 ft RA 709 – ½ W filtered low heat. 70 flm 6.79	6127 6128 6129	1443 1447 1447

6137 - Start here on new filler

21 Hole 005 1½ spiral 3½ lb. 4 rings. 24 g 10 f 21% KOH for Holland to ~~test~~ to be put with 2 chgd 72 4.60	6130 6131	
Dup 6127 Long tube 70 flake 6.71	6132 6133 6134	1417 1427 1427
21 Hole 005 1½ spiral 3½ wt 4 rings - ½ wash not fill low heat. 10 flake 24 green **New filler** 21 KOH 2 gr LiOH. one grm aluminum	6137 6138 6139	
Dup 6137 15% NaOH, 2 LiOH. 1 grm aluminum new filler	6140 6141 6142	
Dup 6137 21% KOH, 2 LiOH. 500 mlg aluminum new filler	6143 6144 6:45	
Dup 6137 15% NaOH. 2 LiOH. 500 mlg aluminum new filler	6146 6147 6148	
Dup 6137 21% KOH. 2 LiOH. 1 grm Iodide Pot new filler -	6149 6150 6151	

Flat pkts 3.2 grm Reg grafite Mix 21% KOH, 2 grms LiOH.	6152 6153 6154 6155 6156		
Dup 6152 15% NaOH. 2 LiOH.	6157 6158 6159 6160 6161		
Dup 6152 21% KOH. 2 LiOH. 1 grms Aluminum	6162 6163 6164 6165 6166	ng	Co
Dup 6152 15% NaOH. 2 LiOH. 1 grms Aluminum	6167 6168 6169 6170 6171	ng.	Co
Dup 6152 21% KOH. 2 LiOH. 250 milg Alumin	6172 6173 6174 6175 6176	ng	Co

Dup 6152	6177		
15% NaOH.	6178		
2 LiOH	6179	Mg	Co
250 Mlg Aluminum	6180		
	6181		
Dup 6152	6182		
21% KOH	6183	Mg	Co
2 LiOH.	6184		
1 grm Iodide Potasium	6185		
	6186		
21 Hole 005 1½ spiral 3½ wt 4 rings ½ wash	6187		
not felted dried low heat 21% KOH.	6188		
5 grammes Oxide Mercury precipitated	6189		
	6190		
Dup 6187			
15% NaOH.	6191		
5 grammes Oxide of Mercury precipitated	6192		
Dup 6187	6193		
21% KOH 5 grams Oxide Mercury precipitated	6194		
2 grms LiOH,	6195		
Dup 6187	6196		
15% NaOH, 2 LiOH 5 grms Oxide Mercury	6197		
precipitated	6198		
Dup 6187	6199		
21% KOH. 3 gramme Ferrous Hydroxide	6200		
	6201		

Dup 6187 21% KOH, 2 grms LiOH. 3 grms Ferrous Hydroxide	6202 6203 6204	
21 Hole 005 1½ spiral 3½ wt 4 Rings – ½ wash not filled dried low heat – 24 grms 10 flake – No 1 position on new filler	6205 6206 6207	
Dup 6205 No 2 position new filler feed	6208 6209 6210	
Dup 6205 No 3 position of feed	6211 6212 6213	
Dup 6205 No 4 position of feed	6214 6215 6216	
Dup 6205 No 5 position of feed	6217 6218 6219	
21 Hole 005 1½ spiral 3½" Cut off Rings 10 Fl 24 No 2 green – 21% KOH 3 grms Acetone Each cell	6220 6221 6222	
Dup 6220 21% KOH, 3 grms acetone + 2 grms LiOH Each cell.	6223 6224 6225	

Hereafter 1/2 wash not fil dried low heat will be called No 2 green

Dup of 6220 – 15% NaOH, 2 grms LiOH + 3 grms Acetone Each cell	6226 6227 6228
Dup 6220 15% NaOH, 3 grms Acetone Each cell	6229 6230 6231
Dup 6220 In 21% KOH, 3 grms formate Potash Each cell –	6232 6233 6234
Dup 6220 21% KOH, 2 grms LiOH 3 grms formate Potash Each cell	6235 6236 6237
Dup 6220 [illegible] 21% KOH, 3 grms Ammonia [illegible] Each [illegible]	6238 6239 6240
Dup 6220 21% KOH, 3 grms Ammonia + 2 grms LiOH –	6241 6242 6243
[illegible] – [illegible] containing [illegible] Potash	6244 6245 6246
[illegible] 21% KOH, Con[illegible] 3 [illegible]ma	6247 6248 6249

Dup 6220 21% KOH. 3 grms Acetamide	6250 6251 6252
21 Holes 005 1½ spiral 3½ 4 rings New packer No 2 green – 10 15% KOH, 7½% NaOH, 2.5% LiOH. 10 ft 24 green	6253 6254 6255
No 5575-6477 with new Ni tubes ½ w not fil [illegible] heat Run again — 33% KOH to acc of [illegible] 33 [illegible] removed [illegible] bad	6256 6257 6258
21 Holes 005 1½ spiral 3½ lot 4 Rings — No 2 green 24 g 10 ft 2 tubes one Reg mix [illegible] 5 grms 21% KOH.	6259 6260 6261
Dup 6259 - 21% KOH 2 grms LiOH. Each cell	6262 6263 6264
Dup 6259 15% NaOH. 2 grms LiOH Each cell –	6265. 6266 6267
Dup 6259. 15% NaOH, 3 grms LiOH – Each cell	6268 6269 6270
Dup 6259. 15% NaOH. 3 grms Bromide Potassium Each cell	6271 6272 6273

Dup 6259 - 15% NaOH, 3 grms Chloride Potassium Each cell	6274 - 6275 6276		
Dup 6259 15% NaOH, 3 grms Bromide Sodium Each cell -	6277 6278 6279		
Dup 6259 15% NaOH. 3 grms, Chloride Sodium Each cell	6280 6281 6282		
Dup 6259 21% KOH. 3 grms Bromide Potassium Each cell	6283 6284 6285		
Dup 6259 21% KOH, 3 grms Chloride Potassium Each cell.	6286 6287 6288		
Dup 6259 21% KOH, 3 grms Bromide Sodium Each cell	6289 6290 6291		
Dup 6259 21% KOH, 3 grms Chloride Sodium Each cell -	6292 6293 6294		
Dup 6259 21% KOH, 3. grms Chlorate Potassium	6295 6296 6297		

Dup 6259 21% KOH. 3 grms Chlorate Sodium	6298 6299 6300		
Dup 6259 15% NaOH. 3 grms Chlorate Potash	6301 6302 6303		
Dup 6259 15% NaOH. 3 grms Chlorate Sodium -	6304 6305 6306		
Dup 6259 21% KOH. 300 milligrams Brimstone 2 grms LiOH =	6307 6308 6309		
Dup 6259 15% NaOH. 300 mlg Brimstone 2 grms LiOH.	6310 6311 6312		
Dup 6259 21% KOH, 3 grm Fluoride Potassium	6313 6314 6315		
Dup 6259 15% NaOH, 3 grms Fluoride Sodium -	6316 6317 6318		
Dup 6259 21% KOH 3 grms Borax	6319 6320 6321		

Dup 6259 15% NaOH, 3 grms Borax	6322 6323 6324
Dup 6259 21% KOH, 3 grms Nitrate Potash	6325 6326 6327
Dup 6259 21% KOH, 3 grms Nitrate Soda	6328 6329 6330
Dup 6259 15% NaOH, 3 grms Nitrate Potash	6331 6332 6333
Dup 6259 15% NaOH, 3 grms Nitrate Soda	6334 6335 6336
Dup 6259 21% KOH, 3 grms Meta Stannate Soda	6337 6338 6339
Dup 6259 15% NaOH, 3 grms Meta Stannate Soda	6340 6341 6342
Dup 6259 21% KOH, 3 grms Chloride Lithium	6343 6344 6345

Dup 6259 15% NaOH, 3 gr Chloride Lithium	6346 6347 6348		
Dup 6259 21% KOH. 3 grms Carbonate Potash	6349 6350 6351		
Dup 6259 15% NaOH, 3 grms Carbonate Soda	6352 6353 6354		
Dup 6259 21% KOH, 3 grms Carbonate Potash 2 grms LiOH,	6355 6356 6357		
Dup 6259 15% NaOH, 3 grms Carbonate Soda 2 grms LiOH,	6358 6359 6360		
Dup 6259 21% KOH, 3 grms Chloride Zinc	6361 6362 6363		
Dup 6259 15% NaOH, 3 grms Chloride Zinc	6364 6365 6366		
Dup 6259 21% KOH, 3 grms Chloride Manganese manganous	6367 6368 6369		

Dup 6259 15% NaOH, 3 grm Manganous Chloride	6370 6371 6372
Dup 6259 21% KOH, 3 grms Nitrate Lead	6373 6374 6375
Dup 6259 15% NaOH, 3 grms Nitrate Lead -	6376 6377 6378
21 Hole 005 1½ spiral 3½ 4 rings No 2 gr 12 + 24 green 21% KOH.	6379 6380 6381
Dup 6379 14 flake 24 green 21% KOH.	6382 6383 6384
Dup 6379 — Edison Soak in Bismuth ammon chl in Chl ammonia - 21% KOH.	6385 6386 6387
21 Hole 005 1½ Spl 3½ wt 14 rings 1 of 24 No. 2 green 2 oz green under bell jar for 1 week with water 21% KOH	6388 6389 6390
21 Hole 005 1½ spiral - 1 of 24 No 2 green 12% NaOH, 3 grms LiOH Each cell	6391 6392 6393

Dup 6391	6394		
10% $NaOH$,	6395		
3 grms $LiOH$	6396		
Dup 6391	6397		
8% $NaOH$,	6398		
Saturated with $LiOH$	6399		
Dup 6391	6400		
5% $NaOH$	6401		
Saturated with $LiOH$	6402		
Dup 6391	6403		
3% $NaOH$,	6404		
Saturated $LiOH$..	6405		
Duplicate 6391	6406		
13% $NaOH$,	6407		
5 grms Thallious Hydroxide	6408		
Dup 6391	6409		
13% $NaOH$,	6410		
2 grms Thallious Hydroxide	6411		
Dup 6391	6412		
21% KOH,	6413		
2 grms Thallious hydroxide	6414		
Dup 6391 —	6415		
Saturated Solution $LiOH$,	6416		
	6417		

Phono Works Truck No 1

Cell No	% KOH	% K_2Co_3	% KCl	% K_2SO_4	Truck 1 E 18 Cells
8193	8.47 %	2.27	.06	.04	one year in use
8198	9.10	2.49	.04	.05	
8199	9.09	2.50	.05	.06	
6921	12.98	1.14	.10	.04	Truck No 2
6954	16.06	1.37	.06	.06	Cells come from Sloanes truck been running about 2 months in Phono Works
6940	13.87	1.28	.05	.05	
9990	15.66	1.49	.04	.06	Truck No 3
10018	14.12	2.04	.07	.06	July 18 1906
9965	14.41	1.72	.06	.06	
	average				
	8.88	2.42			Truck 1
	14.28	1.26			" 2
	14.73	1.75			" 3

No 3 Truck 6 months lost 6.59 % of the 21— or 1 unit of KOH per month, + gained $\frac{1}{10}$ of 1 part K_2CO_3 per month

Iron —

		1	2	3	4	5	6	7	8	per gram Fe	gram mix	Amp effy	Watt E
50 Fe 50 Cu Red + Self H. Ra 706 no Hg 5 g	2643	1100	845	665	117	92	84	735					
	2644	1100	825	665	108	96	84	732	Co				
	2645	1095	800	645	109	84	92	732					
75% Fe 25% Bi 5 g 707 Ra – Red H. self H	2666	1860	1462	1760	1433	1392	1348	1400	1837	475	356		
	2667	1740	1380	1640	1262	1183	1125	1387	1725				
50% Fe 50% Bi. Ra 709 Red by H Self H. 5 g	2668	1100	1200	1260	1067	1000	992	1292	1300	520	260		
	2669	1080	1200	1260	1071	1053	993	1255	1300				
60 Fe 40 Cu Red by H. 5% HgO. self H. 5 g	2670	870	1290	1290	983	842	821	1270	1300	440	264		
	2671	860	1400	1400	1000	833	833	1377	1340				
30 Cu 70 Fe Red by H. Self H, 5% HgO 5 g	2672	1170	1055	1080	1000	1210	117	1325	1242	350	249		
	2673	1140	1055	1070	958	1183	1100	1295	1250				
80 Fe 20 Cu 5% HgO	2720	1165	1170	1060	1127	1050	1167	1392	1375	336	269		
	2721	1140	1170	1100	1083	1083	1167	1372	1317				
40 Fe 60 Cu Ra 724 5% HgO	2722	995	1145	1200	817	737	833	1072	1250	587	235		
	2723	837	1025	1100	800	704	783	1000	1100				
40 Fe 60 Cu No Hg Ra 720	2724	900	1000	1000	721	654	667	1100	1000				
	2725	970	1070	1100	775	733	833	1150	1200				
Reg Fe 15% HgO – 5 g	2726	1337	1200	1445	1167	1000	Co						
	2727	1300	1165	1370	1167	992	Co						
Reg Fe 20% HgO 5 g	2728	1310	1145	1355	1150	987	Co						
	2729	1332	1090	1322	1062	987	Co						
Reg Fe 25% HgO 5 g	2730	1225	1085	1300	1075	983	Co						
	2731	1242	1140	1350	1117	983							
Reg Fe 40% HgO 5 g	2732	720	875	1100	917	833	Co						
	2733	792	980	1100	917	871	Co						

		1	2	3	4	5	6			Per gram Fe	gram mix	ampere effy	Watt effy
5 grms Reg Fe 30% H_2O	2734	967	950	1130	917	833	Co						
	2735	1075	1050	1192	967	833	Co						
5 gr Reg Fe 50% H_2O	2736	470	795	925	767	667	Co						
	2737	490	795	957	754	771							
5 gr RA 731 30% Cu 70% Fe Self H 4% H_2O	2738	985	857	Co									
	2739	987	867	Co									
5 gr RA730 30 Cu 70 Fe 8% H_2O Self H	2740	1000	847	C									
	2741	1005	855	Co									
DrG-12 5 grs	2742	500	480										
	2743	510	475										
DrG 27 70 Fe 30 Cd Red by H. Self H 5% H_2O	2794	1387	1450	1485	1023	1033	1372	1345	1215	350	247		
	2795	1350	1480	1435	1027	1033	1372	1345	1253				
DrG 28 Red by H. Self H 5% H_2O	2796	980	1075	1092	208	250	400	500	Co				
	2797	980	1100	1135	979	621	582	995					
RA 741 60 Fe 40 Cu Red H, Self H. 10% H_2O	2810	1100	1195	1200	996	1100	1325	1400	1350	448	269		
	2811	1092	1195	1192	1000	1105	1327	1400	1335				
RA742 70 Fe 30 Cu Red H Self h 10% H_2O –	2812	995	960	1000	898	1075	1150	1145	1060	300	210		
	9813	960	910	967	833	1000	1060	1100	1040				
RA 739 – 40 Fe 60 Cu 10% H_2O – Red H Self H.	2814	960	1080	1080	954	1055	1160	1227	1175	612	245		
	2815	912	1082	1082	962	1058	1185	1290	1275				
RA740 50 Fe 50 Cu Red H, Self H 10% H_2O	2816	1127	1200	1215	996	1108	1215	1290	1275	500	251		
	2817	1110	1200	1215	983	1083	1217	1285	1240				
DrG 5% Bi 95 Fe igniting Oxalate 5% H_2O G35 – 5 gr	2827	1405	1400	1600	1492	1400	1470	1475	1530	348	513		
	2828	1400	1400	1665	1533	1400	1600	1600	1600				
DrG 36 10 Bi 90 Fe igniting Oxalate 5% H_2O 5 gr	2829	1537	1410	1640	1517	1417	1600	1567	1600		325		
	2830	1645	1482	1690	1579	1550	1590	1600	1655				

		1	2	3	4	5	6	7	8			per gram Fe	gram mix	amp Eff	Watt Eff
G 37 15% Bi 85 Fe igniting Oxalate Red H Self H 5% HgO 5 gr	2831	1145	1220	1037	1000	1054	1450	1432	1415						
	2832	1165	1240	1100	983	1054	1485	14[illegible]2	1450						
G 38 20 Bi's 80 Fe igniting oxalate Red H Self H 5% HgO 5 g	2833	1062	1185	SC	1467	1317	1600	1550	SC						
	2834	1050	1300	1227	1083	1292	1570	1557	1522						
DrG 38 20 Bi 80 Fe nonpyro 5% HgO 5 g	2869	1575	1300	1500	1217	1350	1400	1572	1572	1700	1700	418	334		
	2870	1600	1300	1485	1142	1342	1470	1500	1540	1675	1645				
No 4 DrG 80 Fe 20 Tin nonpyro 5% HgO 5 g	2881	1660	2145	2072	2175	1833	1800	2212	2055	2210	2090	490	393		
	2882	1545	1955	1787	1900	1900	1550	1900	1745	1780	1840				
DrG 45 - nonpyro 5% HgO 80 Fe 20 Sb 5 g	2883	1537	1437	1675	1442	1625	1666	1790	1780	1950	1880	467	374		
	2884	1595	1370	1650	1454	1600	1675	1790	1782	1900	1857				
DrG 38 5 gr nonpyro no HgO - 20 Bi 80 Fe	2885	1682	1360	1540	1275	1400	1528	1670	1695	1735	1755	440	352		
	2886	1700	1347	1537	1283	1375	1510	1685	1740	1730	1770				
Sodium Ferrous Sulfate fused, Exhausted Self H, mixed reg.	2907	1140	1770	1800	1525	1500	1850	1760	1765	2085	1895	380	372		
	2908	1170	1732	1800	1585	1550	1830	1767	1770	2082	1885				
50 DrG nonpyro 5% HgO 80 Fe 10 Bi 20 Sn	2936	1487	2210	1780	2050	1975	SC	1710	1975	2300	2250	568	412		
	2937	1525	1845	1645	1683	1633	1720	1630	1700	2385	1873				
50 G Self H 5% HgO 80 Fe 10 Bi 20 Sn	2940	1890	1865	2050	1958	1992	1795	1890	2447	2556		712	521		
	2941	1900	1870	2075	2067	2050	1775	1900	2387	2650					
DrG 61 - Self H - 5% HgO 70 Fe 30 Sn	2981	1370	1400	1475	1481	1050	1853	1800	1920			552	385		
	2982	1387	1360	1485	1431	987	1815	1885	1935						
DrG 60 Self H 5% HgO 75 Fe 25 Sn	2985	1140	740	680	768	912	1320	1410	1535			305	313		
	2986	1125	740	675	787	900	1355	1455	1600						

										per gram	cap gram wt	amp Effcy	Watt Effcy
DrG 60 non pyro 5% HgO 75 Fe 25 Sn	2987	900	925	937	550	575	1135	1035	1112	256.	192		
	2988	990	875	880	412	387	930	840	815				
Ferrous Sodium Sulphate non pyro 5% HgO	2993	485	607	1130	793	750	1325	1510	1715	342	344		
	2994	480	620	1255	850	818	1412	1595	1710				
Ferrous Sodium Sulphate Self H - 5% HgO	2995	1190	1517	1832	1437	1362	2057	1940	1860	372	372		
	2996	1235	1770	1990	1475	1500	2072	1950	1865				
62 DrG non pyro 65 Fe 35 Sn 5% HgO	3001	1315	1410	1645	1587	1150	1550	1645	1960	609	396		
	3002	1385	1435	1700	1706	1206	1700	1740	2000				
62 DrG Self heated 5% HgO 65 Fe 35 Sn	3003	1757	2225	1925	1431	1173	1895	2000	1860	606	374		
	3004	1842	2242	2080	1656	1462	2005	2005	2085				
DrG 58 90% Fe 10 Sn Self H. 5% HgO	3005	1615	1505	1380	943	950	1520	1505	1650	369	332		
	3006	1660	1375	1415	1125	1125	1635	1625	1675				
59 Dr Self H 5% HgO 85 Fe 15 Sn	3007	1910	1595	1682	1250	1250	1840	1840	1895	435	371		
	3008	1600	1560	1490	1112	1125	1695	1775	1815				
DrG 69 non pyro 60 Fe 40 Cd 5% HgO	3023	625	1460	1475	806	875	1475	1490	1500	572	309		
	3024	595	1470	1520	925	1025	1545	1585	1595				
DrG 69 non pyro No Hg 60 Fe 40 Cd -	3025	842	1280	1350	725	856	1555	1420	1380	480	290		
	3026	815	1300	1430	875	987	1650	1535	1505				
DrG 63 -- 80 Fe 15 Cu 5 Zn non pyro 5% HgO	3013	965	785	1275	725	712	1475	1525	1580	420	376		
	3014	962	750	1277	925	926	1710	1765	1785				
DrG 63 - 80 Fe 15 Cu 5 Zn Self heated 5% HgO -	3015	1540	1650	1585	1206	1175	1580	1595	1605	396	317		
	3016	1577	1650	1600	1250	1225	1600	1565	1570				
DrG 69 - 60 Fe 40 Cd Self H 5% HgO	3057	1075	1355	1125	962	1037	1452	1417		450	271		
	3058	1220	1275	1100	1075	1150	1327	1295					

										per gram 72		Aveg stg	Wet stg
Regmix moisted pressed 300 [illegible] - 3 g 25 hoT plate Crushed thro 20 mesh strong particles will form fines -	3061	1190	1135	1335	962	1100	868	1400	1375	285	285		
	3062	1285	1290	1390	887	1037	931	1425	1400				

1 tube $\frac{1}{1000}$th part sol

in - 100 cc

120 (1350 (11.25
120
150
120
300

9 times

Fol	Feby 18	
2404	bent slight	$5+\overset{Hot}{5?}-4$
5	Strait but Swelled	
6	Bent $5+\overset{Hot}{50}-4$	
5166	OK 5+40 hot	
5321	$5+\overset{Hot}{28}$-	
22		
23	ok	
24		
25		
26		
5327	5+6 Hot,	
28	ok	
29		
5422		
23		
24	ok Except 5425	
25	breaking	
26		
27	5+12 hot.	
5557	Slight, bent	
58	ok	Spiral.
59	bent	
60	ok 2 cold	
61	ok	
62	bent	
	All 33% ok to date Feby 18 –	

Time of packing

Reg	10	flake	3½ lbs	8 min	24 gr
	20	"	3½	4.5 min	
	20	'	4	4.5 "	
	20	'	4½	5	
	20	'	5	5	
	30	'	3½	3	
	30	'	4	3	
	30	'	4½	3	
	30	'	5	3	
	40	"	3½	2	
	40		4	2	
	40		4½	2	
	40	-	5	2	

Width punched part 3/4 inch
005

		Weight each tube
Old 2400 hole 428 grms E18	34 holes per inch 30 " across	1.786
21 Hole stock 466 grms E18 -	16 holes per inch 20 " across	1.944
Punched stock, 386 grms Cell -	15 " across 17 to the inch -	1.608
26X30. Stock - 478 grms cell.	26 holes per inch 30 holes across.	2060

Weight new cell estimated?

6 - Nickel grid	240.00
180 " Tubes	478.00
144 Iron cups	360.00
Nickel mix incl flake	1632.00
Iron mix	1080.00
Electrolyte	1500.00
Iron grids	130.00
Can.	630.00
Rubber parts	145.00
Upright Studs *	150.00

* not weighed

```
446 ) 6345 00 (14.225
      446
      1885
      1784
       1010
        892
        1180
```

14.225 lbs -

It is actually only 13 lbs

Capacity 75% rate 17.4 watts per lb -

288
3^{00}
864^{00}

1300

3/2811
418/937(2.26
826
1116
1.8.2.2
284

3/3495
522/1165(2.23
1044
1214
1,044
166

3/2742
4/914
228

3/3599
1199
531/1200(2.26
10.62
1382
1.06
3186
318

3/3573
535/1191(222
1070
1210
1070
14

3/2654
396/885(223
792
932
79
158

KCl –

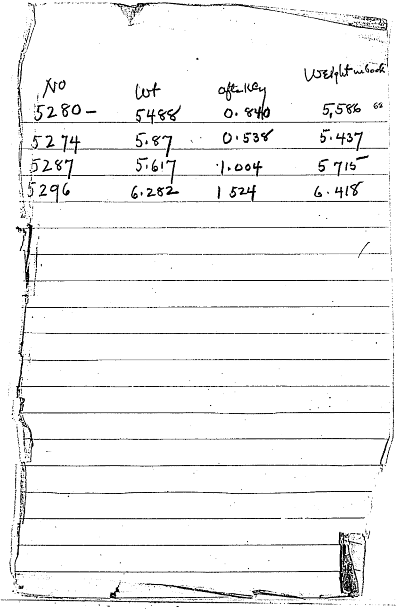
Ni	5321 – 22 23	21 Hole	OK 5 on 6 [illegible]
Ni	5324 25 26	Punched hole	OK 5 [illegible] do
Ni	5327 28 29	Punched Hole Spiral.	
NiCo	2428 29 30.	5 Ni 5 Cf " 2400	18 Hot. Co Bading
Co	2401 02 03	21 Hole 005	30 Runs Hot bent + broken " little split "
Co	2404 05 06	21 Hole 0035	80 Runs Hot – only bent.
Co	2383 – 84 85	2400 8 Rings	6 runs Hot test Badly broken CO –
Co	5166 67	Spiral 21 Hole	5 Runs 1 broken 1 ok –

3/2595
389/865(222
778
878
778
92

3/3161
5/1054
2.11

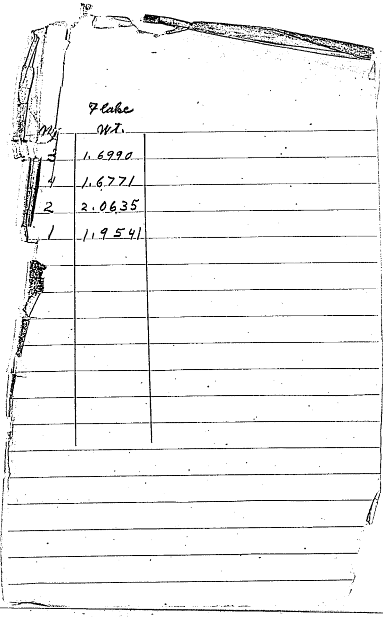
3/3140
495/1047(2.1
990
57

[ITEM FOUND IN BOOK]



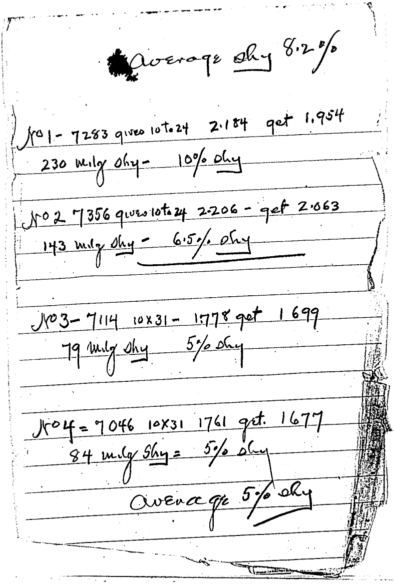
No	Wt	after key	Weight in book
5280 –	5488	0.840	5,586 68
5274	5.87	0.538	5.437
5287	5.617	1.004	5 715
5296	6.282	1 524	6.418

[ITEM FOUND IN BOOK]



No	Flake Wt.
3	1.6990
4	1.6771
2	2.0635
1	1.9541

[ITEM FOUND IN BOOK]



average shy 8.2%

No1 - 7283 gives 10to24 2.184 get 1,954
230 milg shy - 10% shy

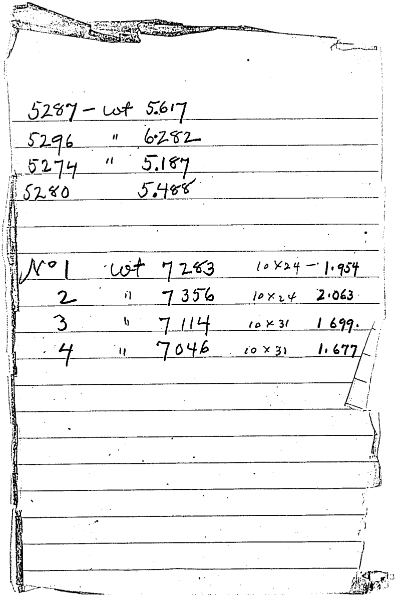
No2 7356 gives 10to24 2.206 - get 2.063
143 milg shy - 6.5% shy

No3 - 7114 10x31 - 1778 get 1699
79 milg shy 5% shy

No4 = 7046 10x31 1761 get. 1677
84 milg shy = 5% shy

average 5% shy

[ITEM FOUND IN BOOK]



5287	– wt	5.617
5296	"	6.282
5274	"	5.187
5280		5.488

No 1	wt	7283	10×24	– 1.954
2	"	7356	10×24	2.063
3	"	7114	10×31	1.699.
4	"	7046	10×31	1.677

[ITEM FOUND IN BOOK]

26+30

21 Hole

1st Cold	2nd Cold	1st 50	2nd 50		
1123	1112	718	806	33	23
1084	1073	646	818	31	2
1078	1009	820	673	29	
1033	1010	844	883	27	
1012	1003	905	919	25	
986	963	899	909	23	
973	964	904	913	21	
952	929	933	933	19	
984	902	931	928	17	
899	859	915	918	15	
869	827	881	913	13	
828	817	855	894	11	
753	747	813	815	9	
875	713	801	792	7	

	29
	27
	25
	23
14	21
12	19
9	17
7	15
5	13
3	11
2	9